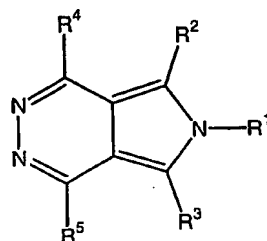


WHAT IS CLAIMED IS:

1. A method of binding the $\alpha\delta$ subunit of voltage gated calcium channels comprising a step of administering an effective amount of a compound represented by Formula (I):



(I)

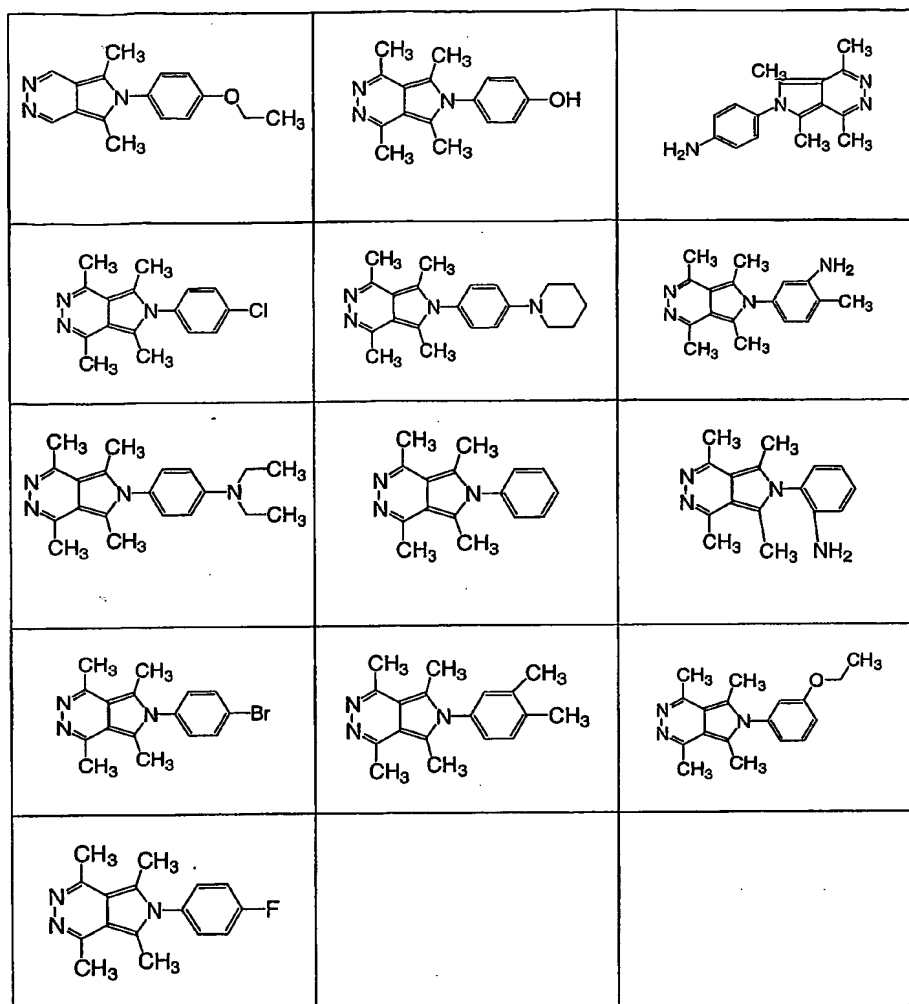
or a pharmaceutically acceptable salt thereof, wherein

- R¹ is -C₀₋₆alkyl-aryl, -C₀₋₆alkyl-heteroaryl, -C₀₋₆alkyl-C₃₋₆cycloalkyl, or -C₀₋₆alkyl-heteroC₃₋₇cycloalkyl, optionally substituted with 1-6 independent halogen, -CN, NO₂, -C₁₋₆alkyl, -C₀₋₆alkyl-C₃₋₆cycloalkyl, -C₀₋₆alkyl-heteroC₃₋₇cycloalkyl, -OR⁶, -NR⁶R⁷, -C(=NR⁶)NR⁷R⁸, -N(-NR⁸R⁶)NR⁷R⁸, -NR⁶COR⁷, -NR⁶CO₂R⁷, -NR⁶SO₂R⁸, -NR⁶CONR⁷R⁸, -SR⁸, -SOR⁸, -SO₂R⁸, -SO₂NR⁶R⁷, -COR⁶, -CO₂R⁶, -CONR⁶R⁷, -C(=NR⁶)R⁷, or -C(=NOR⁶)R⁷ substituents;

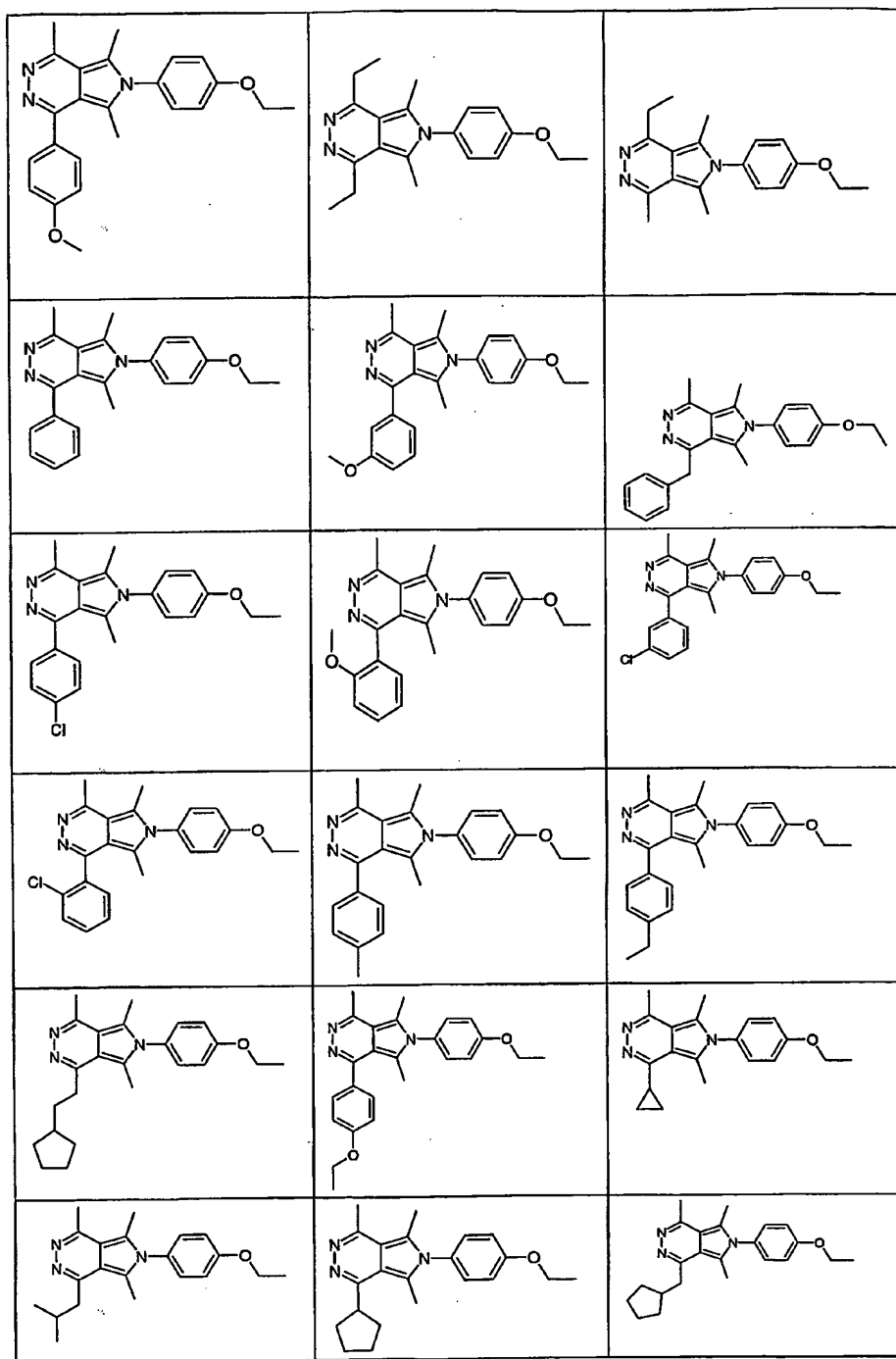
- R², R⁴, R³, and R⁵ each independently is -C₀₋₆alkyl, -C₀₋₆alkyl-aryl, -C₀₋₆alkyl-heteroaryl, -C₀₋₆alkyl-C₃₋₆cycloalkyl, or -C₀₋₆alkyl-heteroC₃₋₇cycloalkyl, optionally substituted with 1-6 independent halogen, -CN, NO₂, -C₁₋₆alkyl, -OR⁶, -NR⁶R⁷, -C(=NR⁶)NR⁷R⁸, -N(-NR⁸R⁶)NR⁷R⁸, -NR⁶COR⁷, -NR⁶CO₂R⁷, -NR⁶SO₂R⁸, -NR⁶CONR⁷R⁸, -SR⁸, -SOR⁸, -SO₂R⁸, -SO₂NR⁶R⁷, -COR⁶, -CO₂R⁶, -CONR⁶R⁷, -C(=NR⁶)R⁷, or -C(=NOR⁶)R⁷ substituents; and

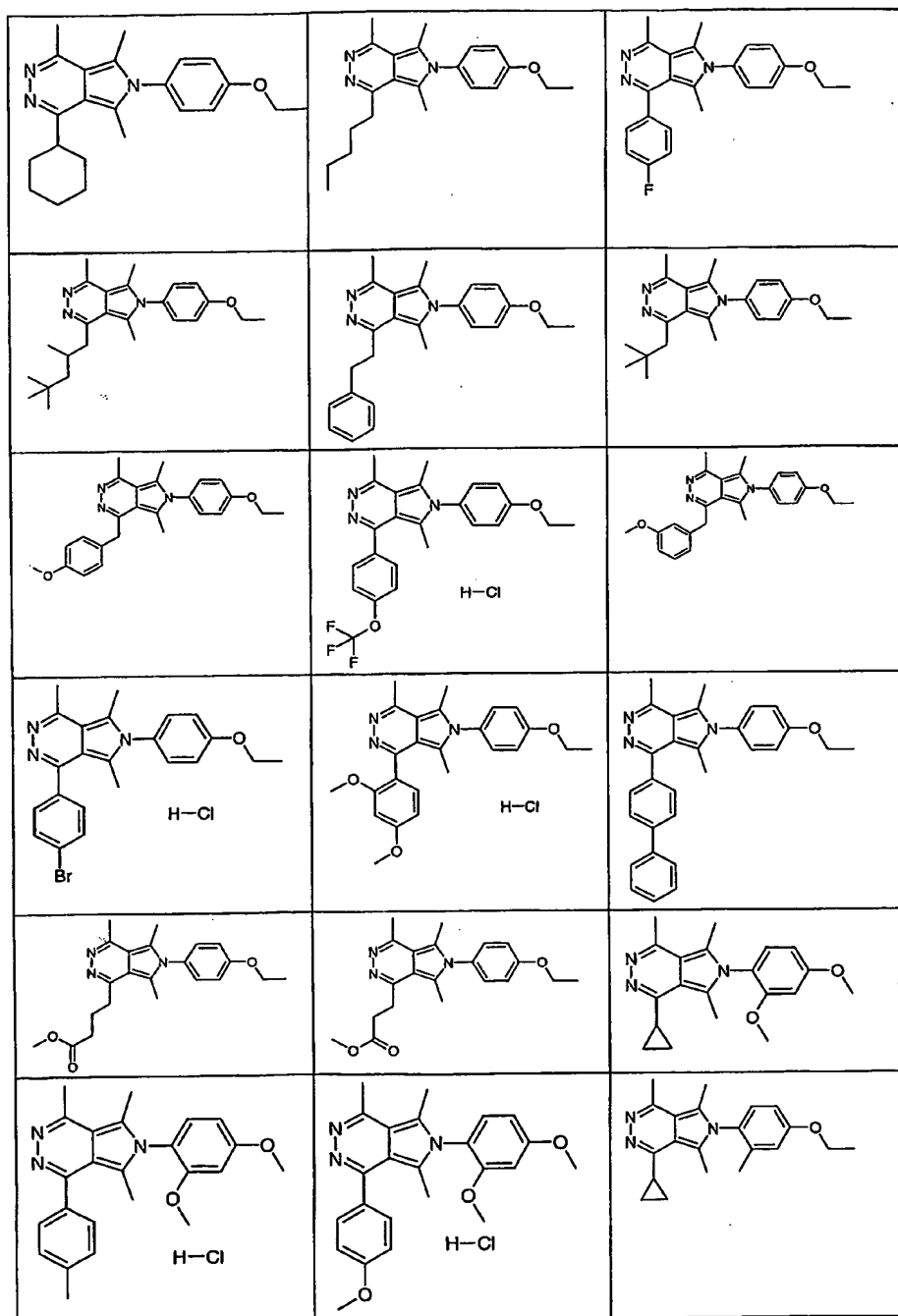
- R⁶, R⁷, R⁸, and R⁸⁸ each independently is -C₀₋₆alkyl, -C₃₋₇cycloalkyl, heteroaryl, or aryl; optionally substituted with 1-5 independent halogen, -CN, -C₁₋₆alkyl, -O(C₀₋₆alkyl), -O(C₃₋₇cycloalkyl), -O(aryl), -N(C₀₋₆alkyl)(C₀₋₆alkyl), -N(C₀₋₆alkyl)(C₃₋₇cycloalkyl), or -N(C₀₋₆alkyl)(aryl) substituents; and

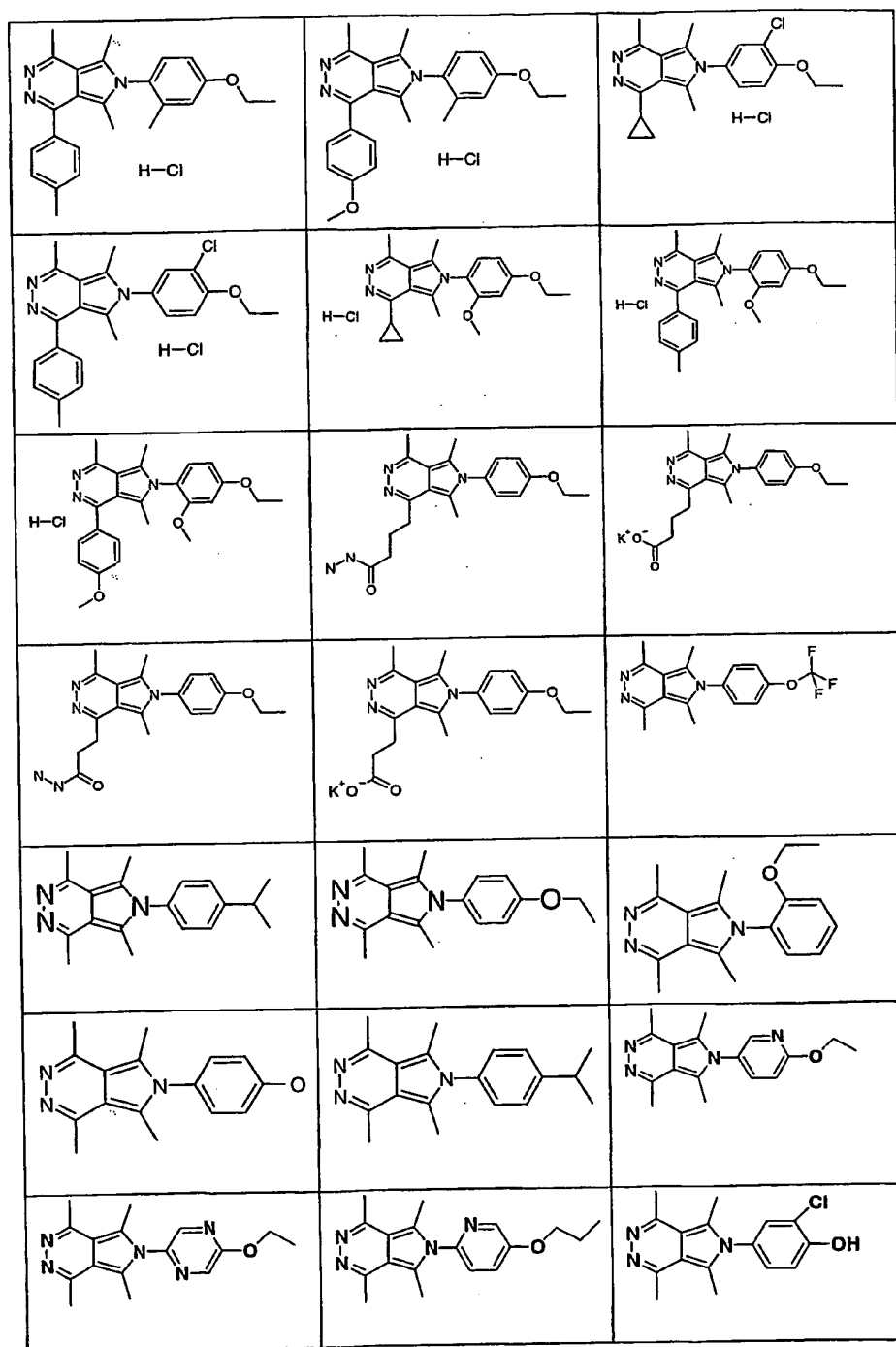
provided that the compound is not selected from the following table:

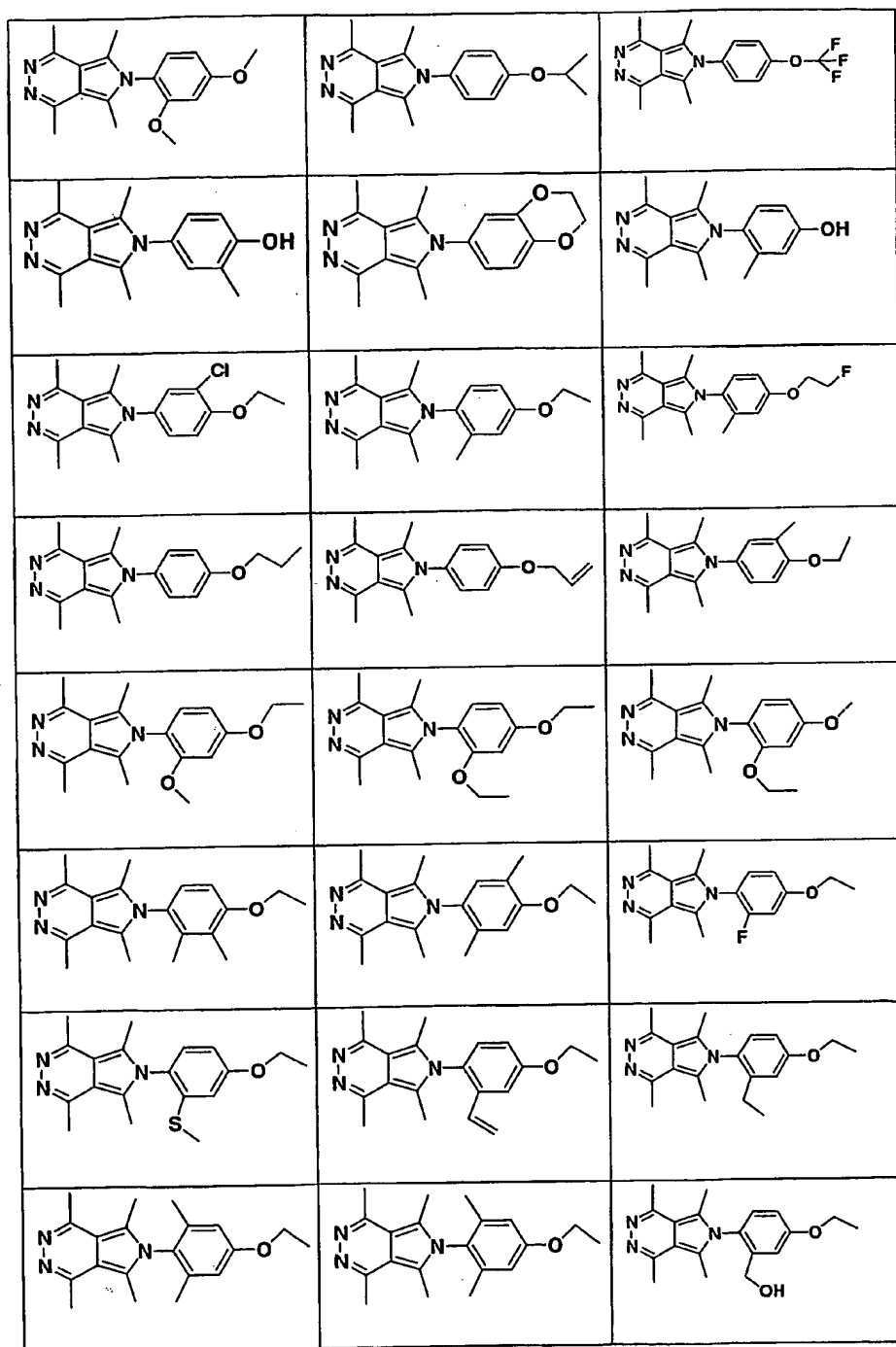


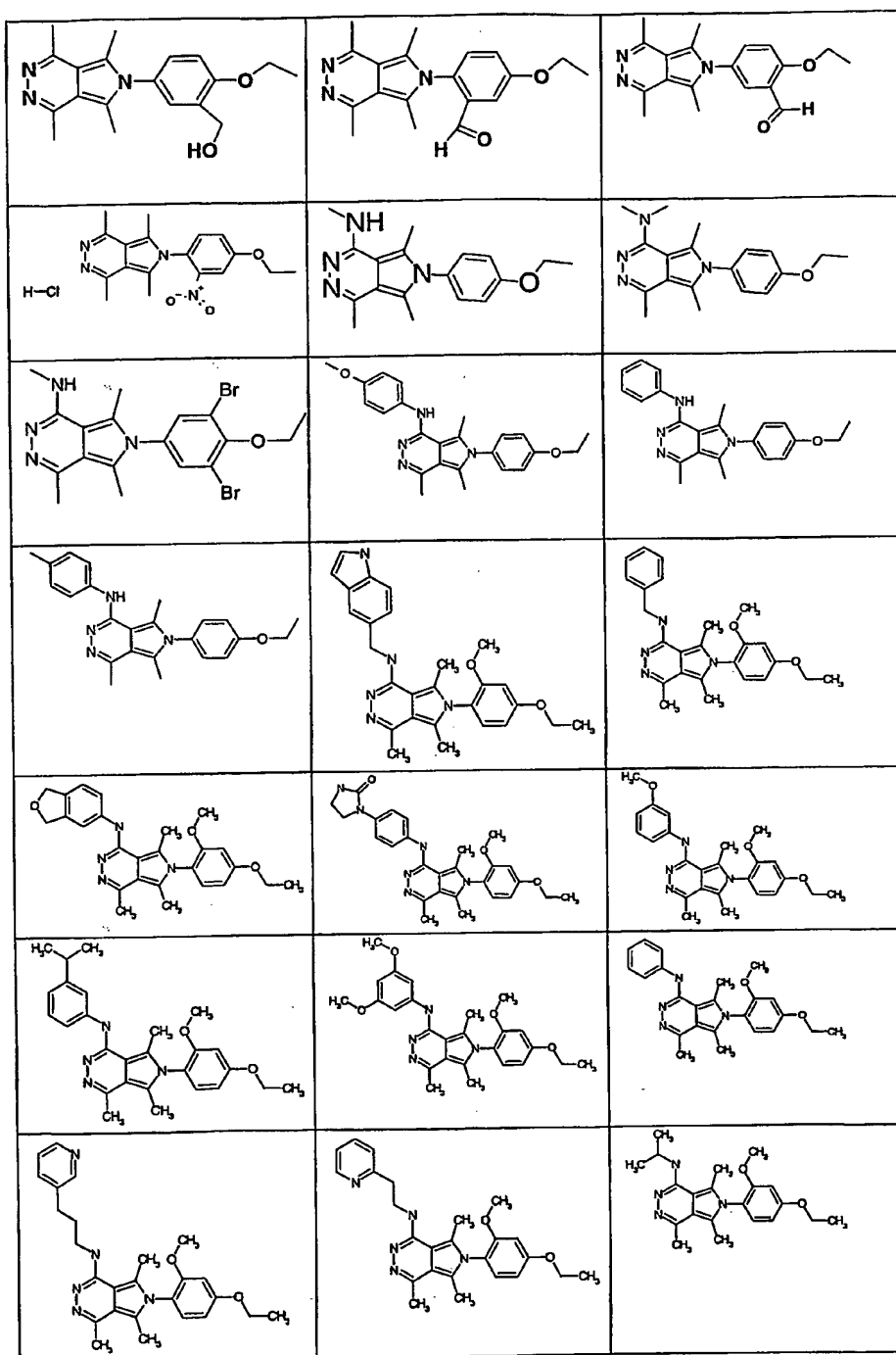
2. The method according to Claim 1, wherein R¹ is -C₀₋₆alkyl-aryl.
3. The method according to Claim 2, wherein R¹ is -C₀₋₆alkyl-phenyl.
4. The method according to Claim 1, wherein the compound is selected from:

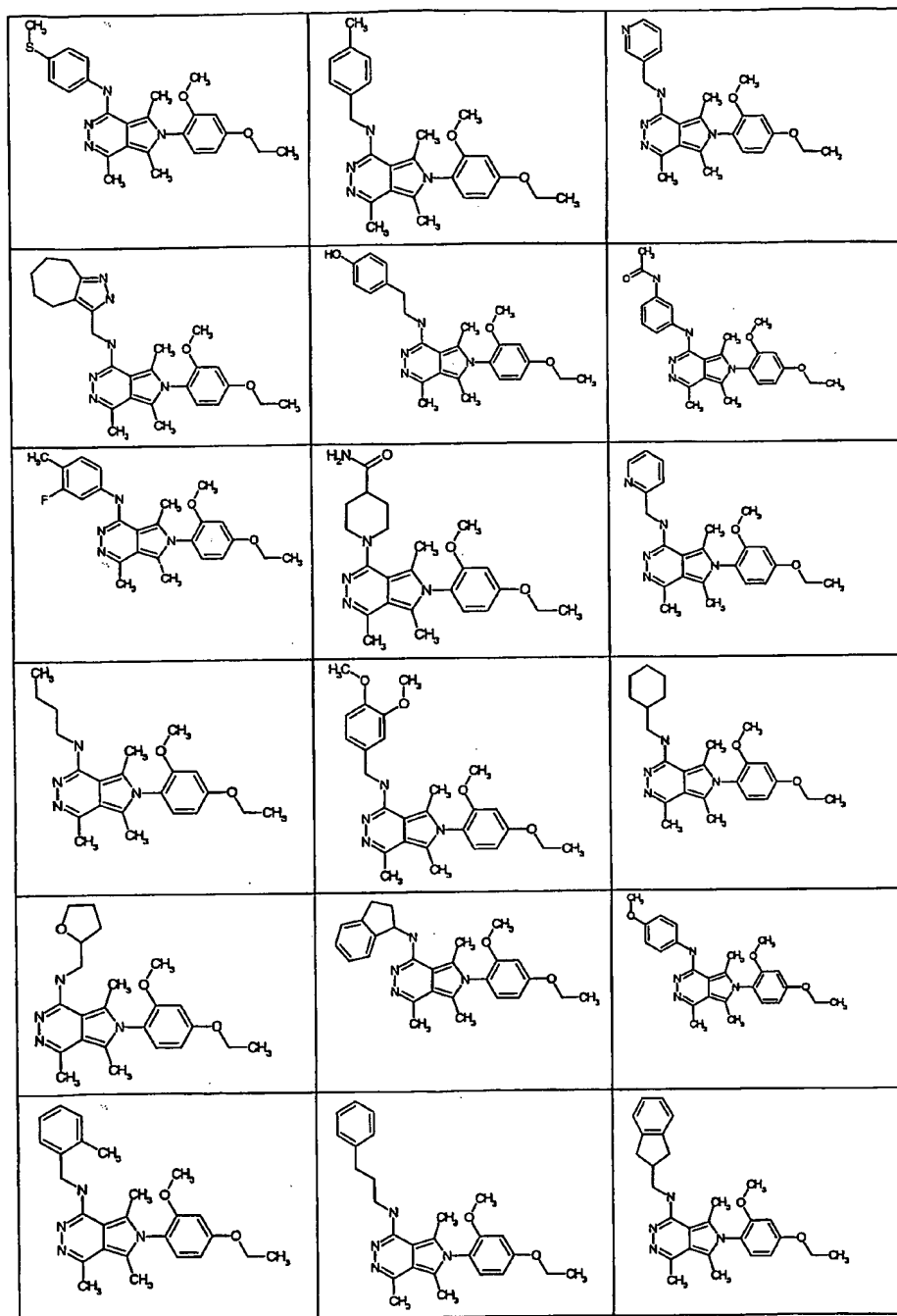


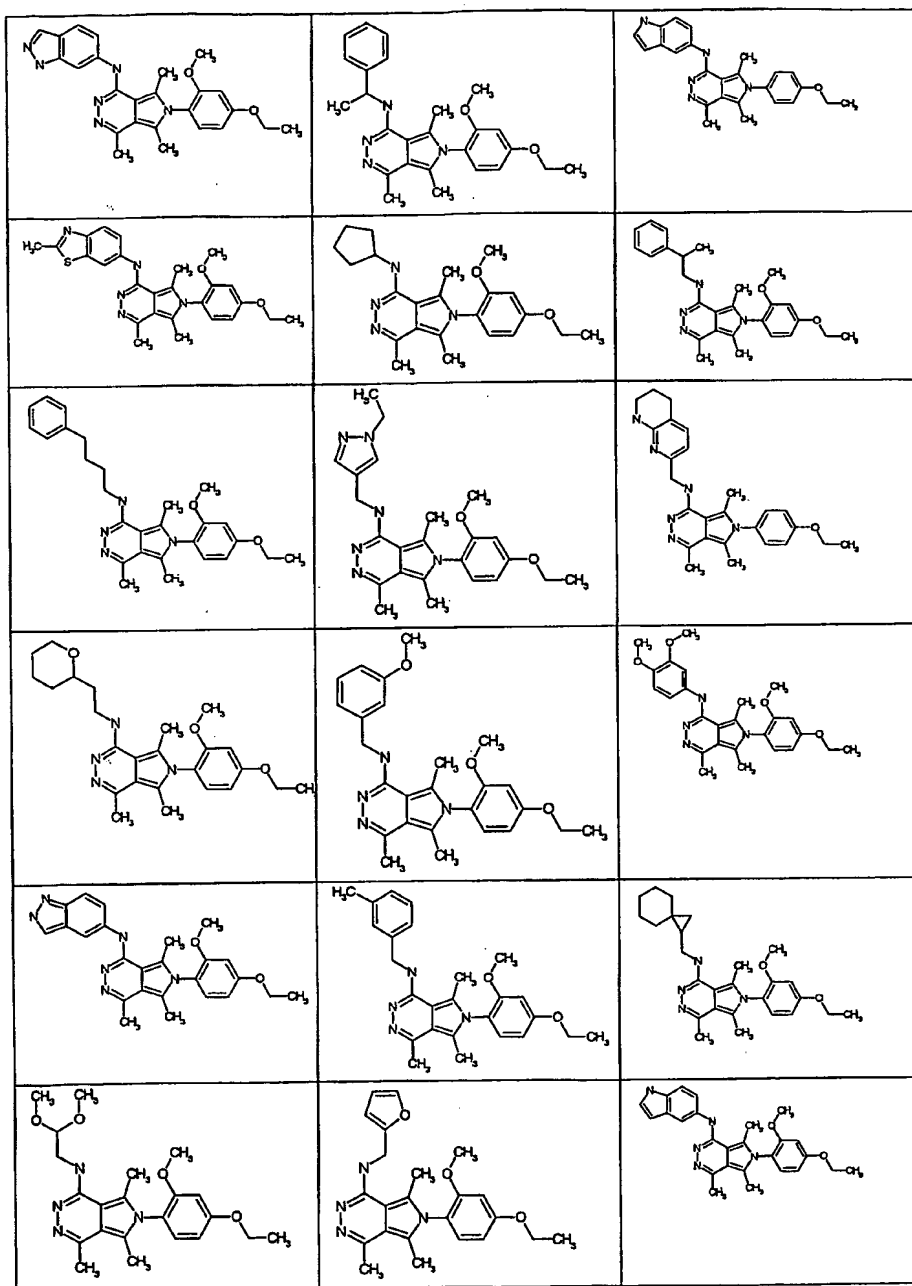


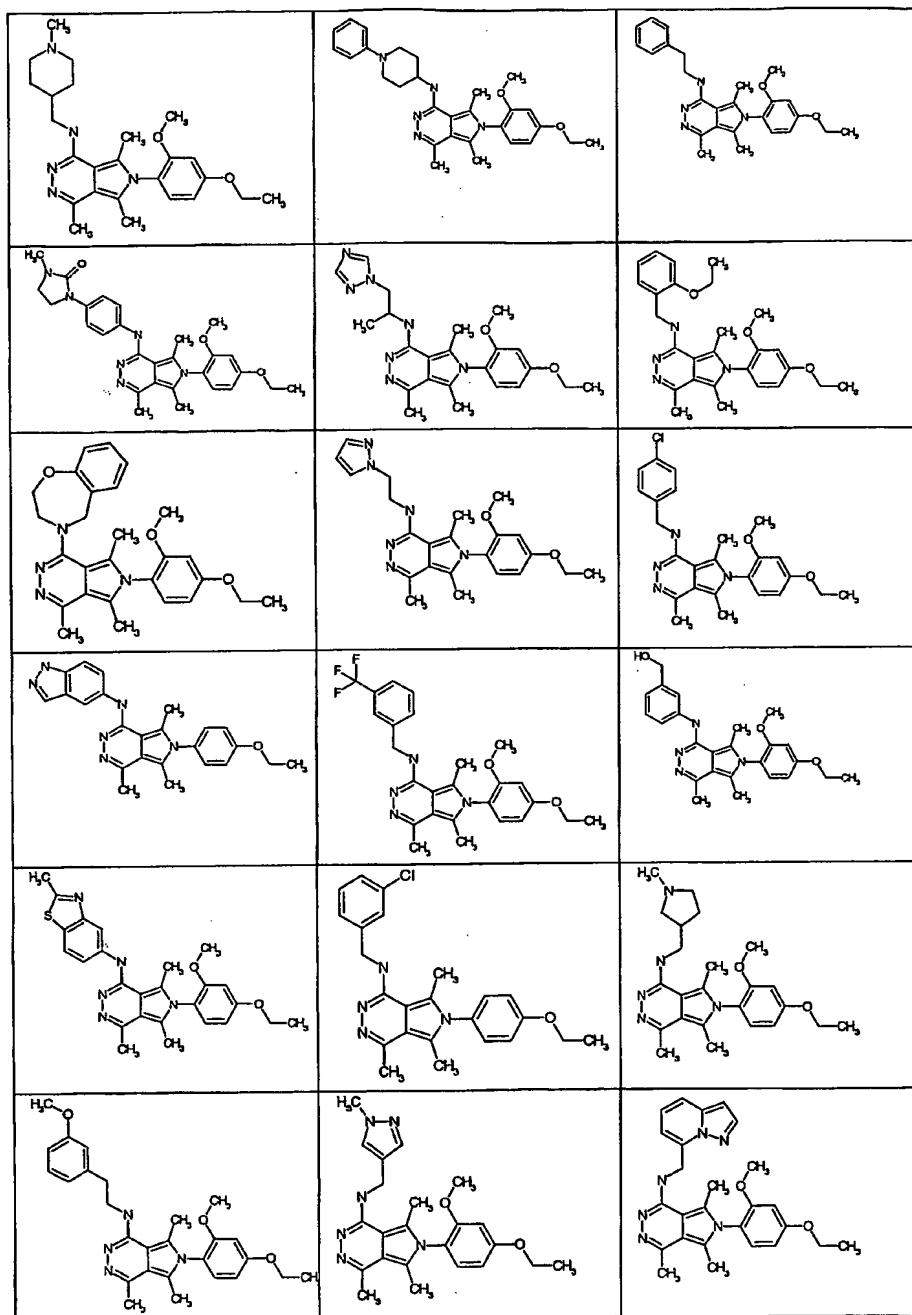


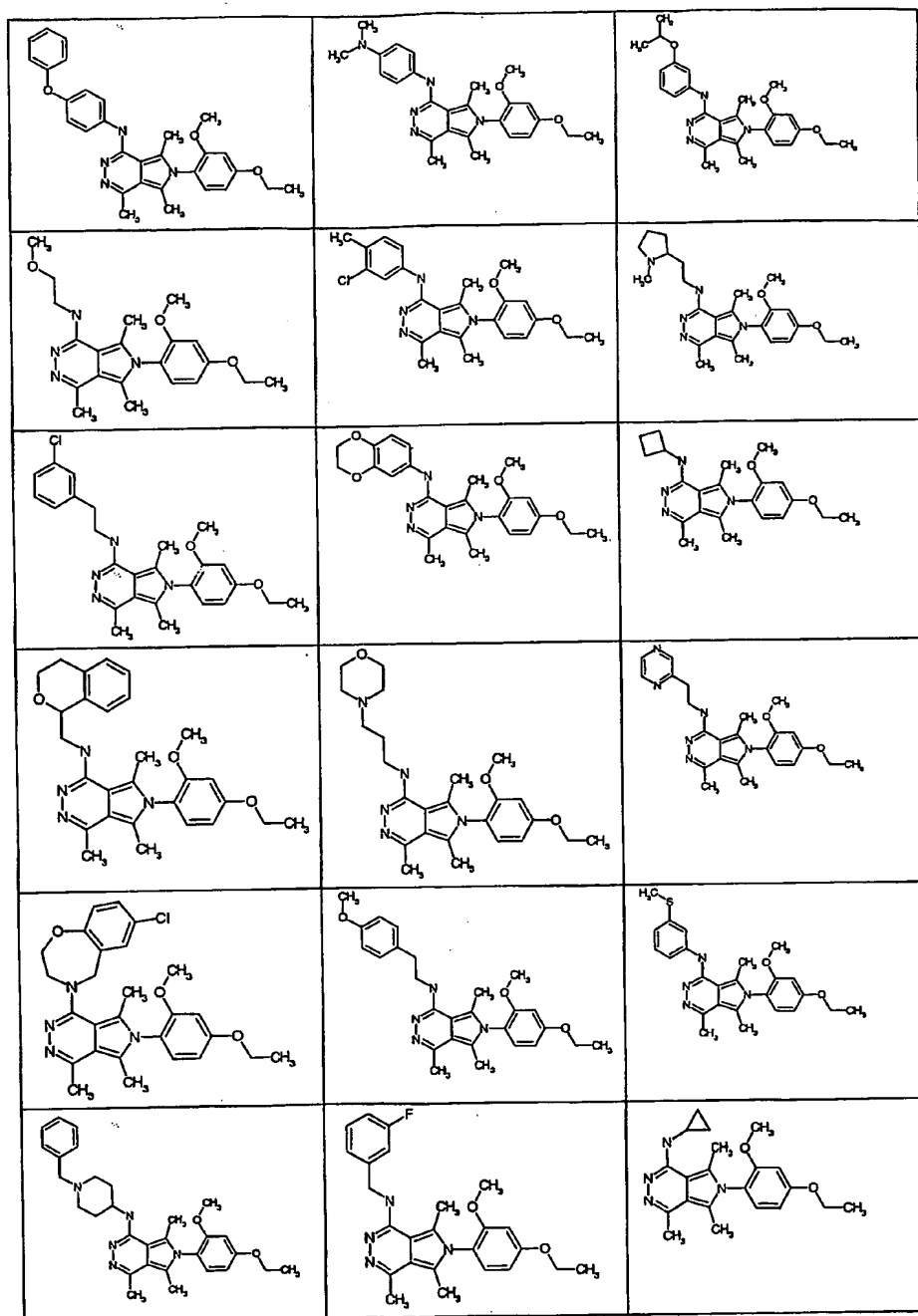


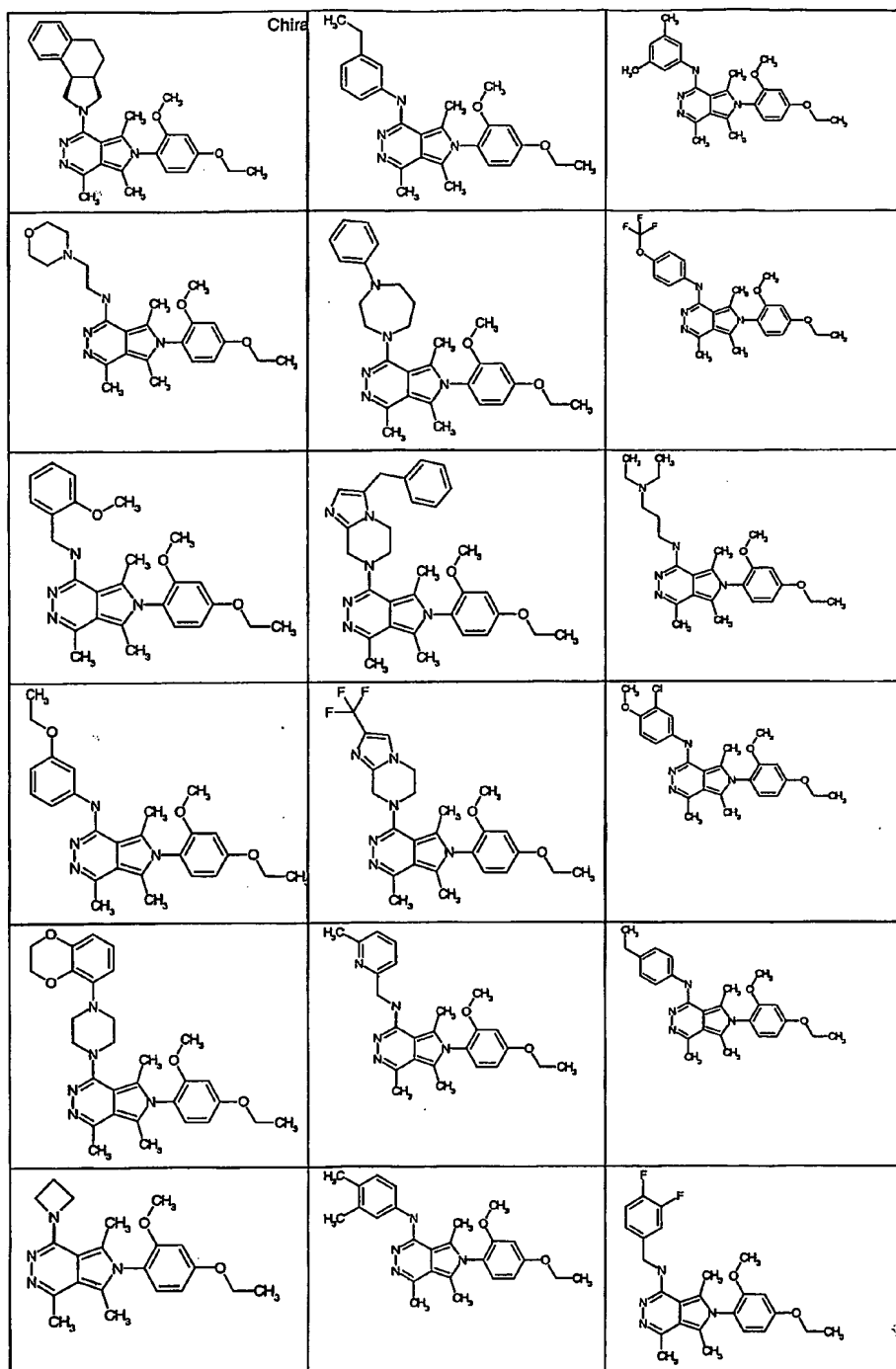


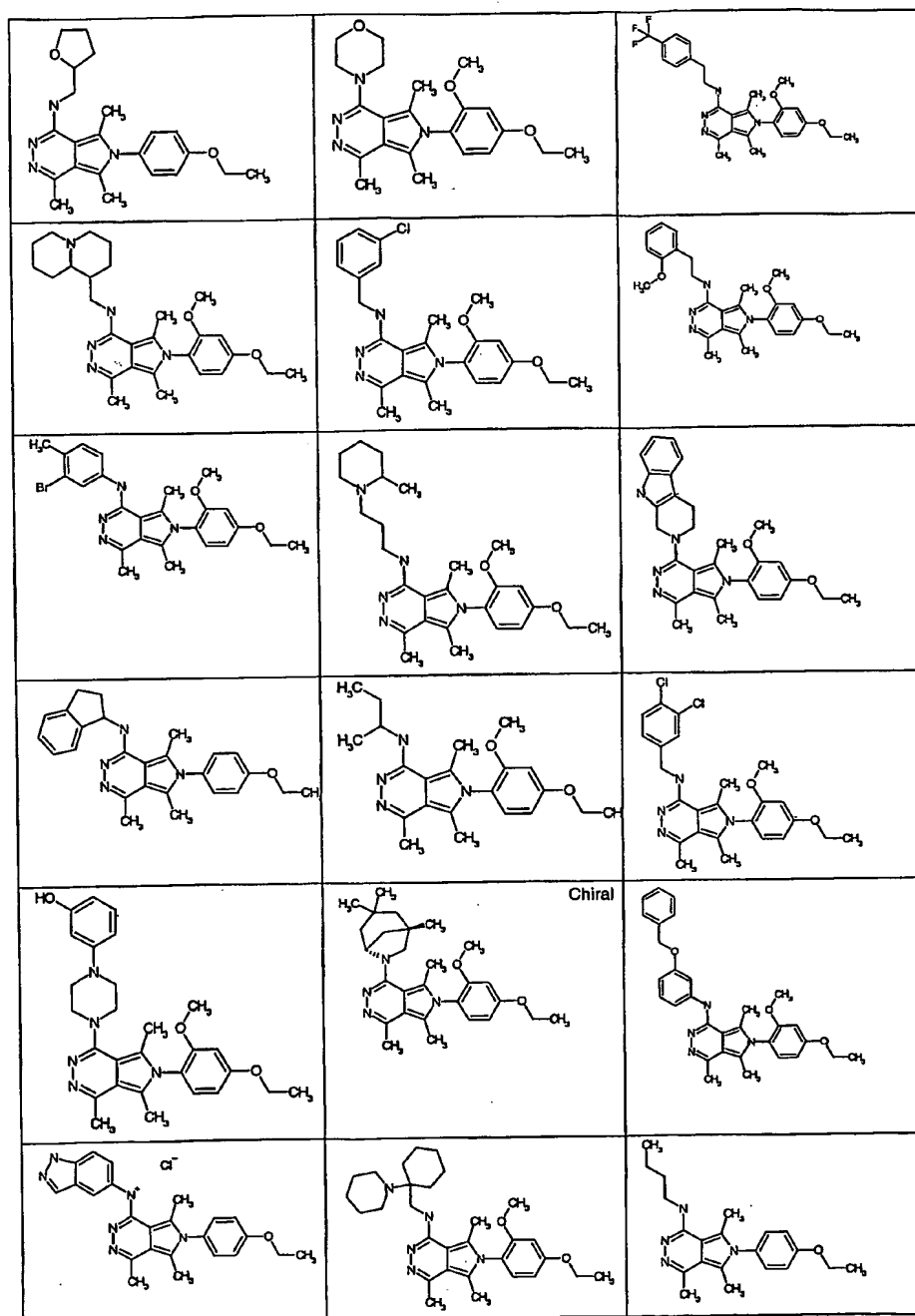


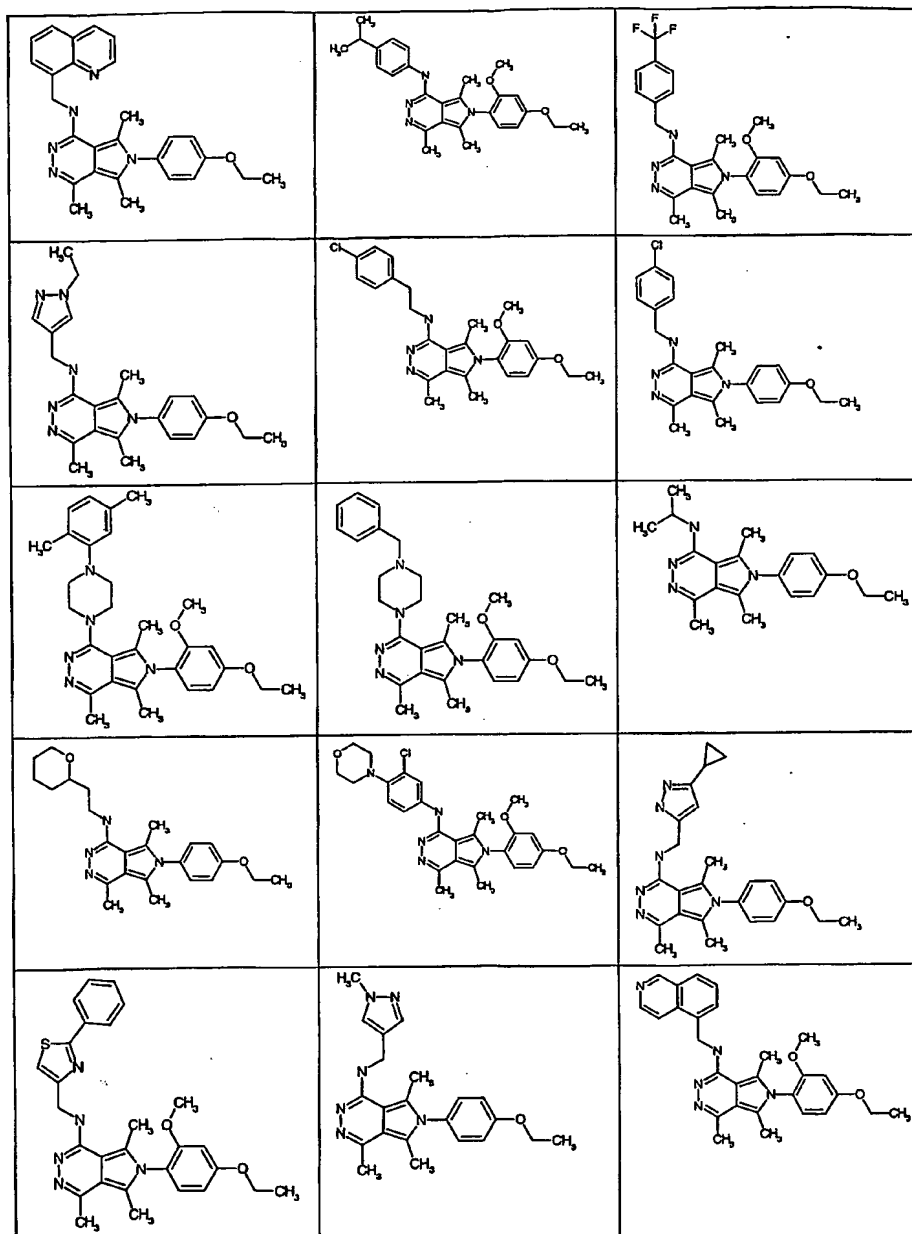


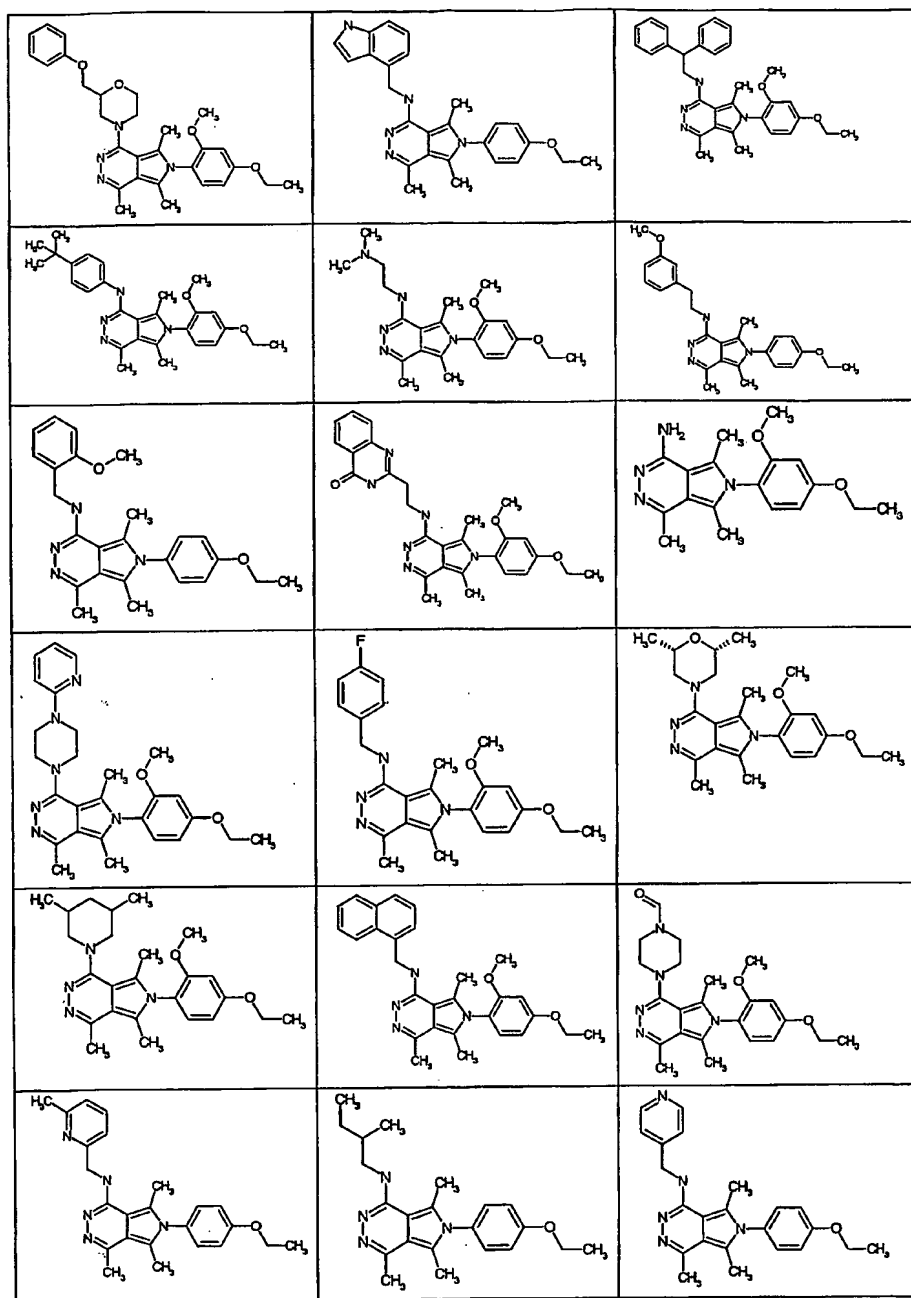


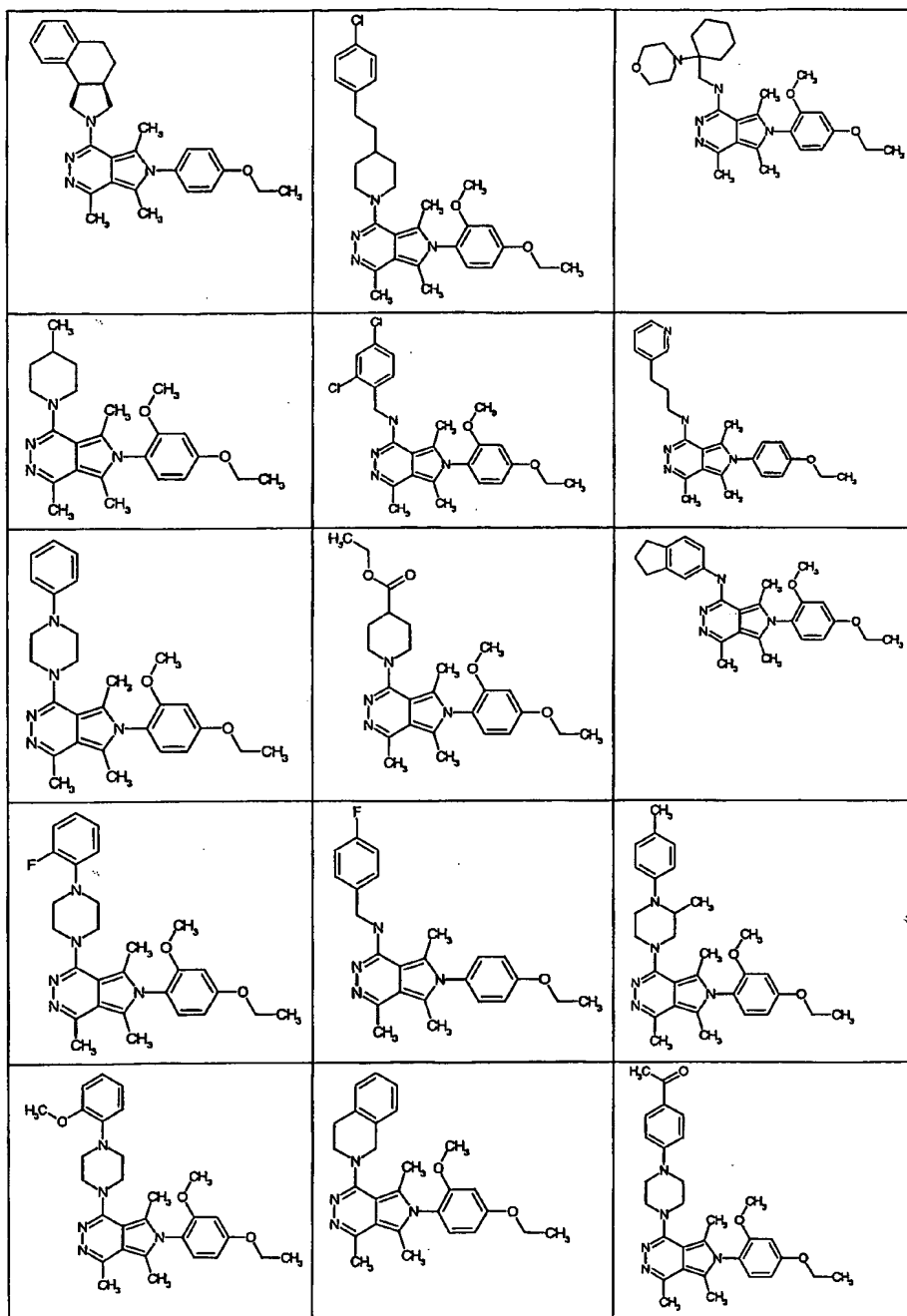


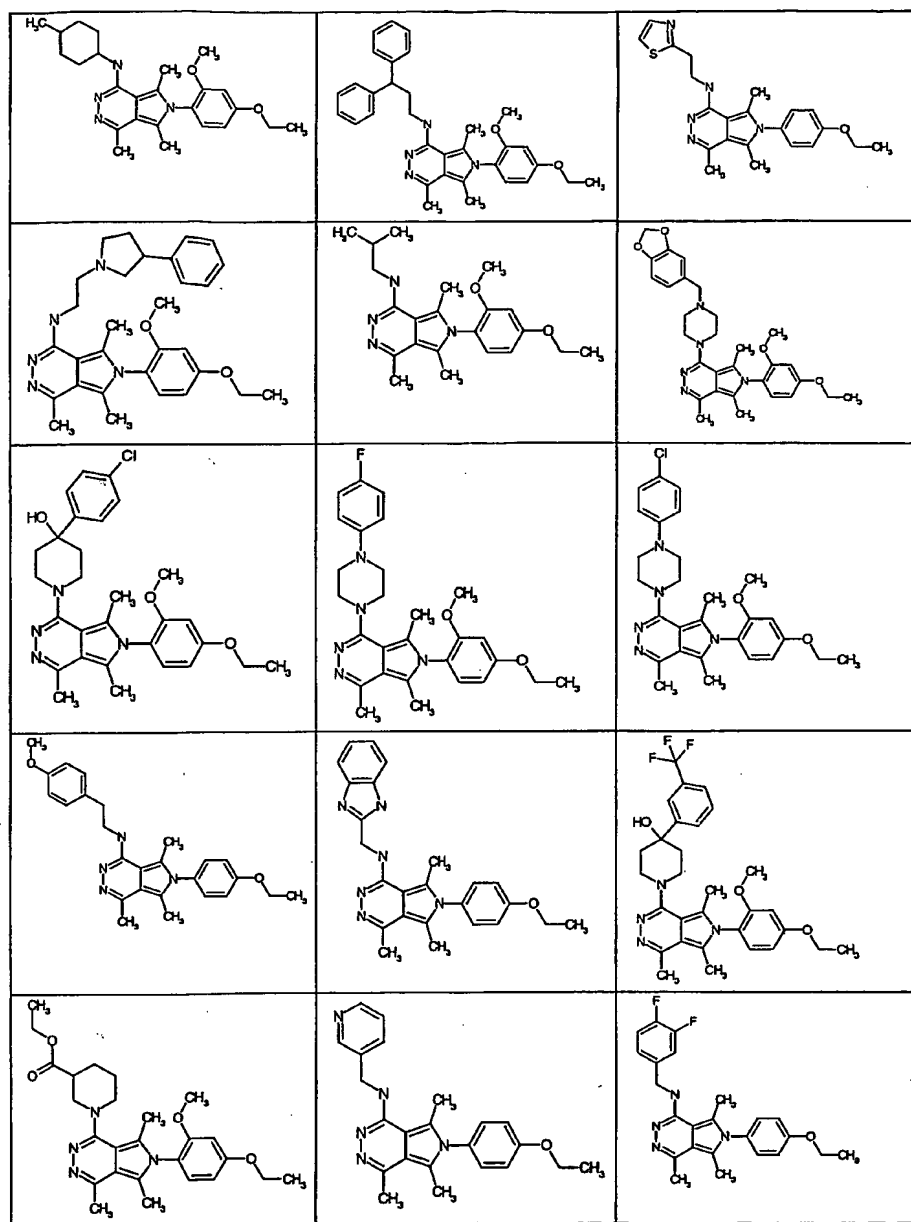


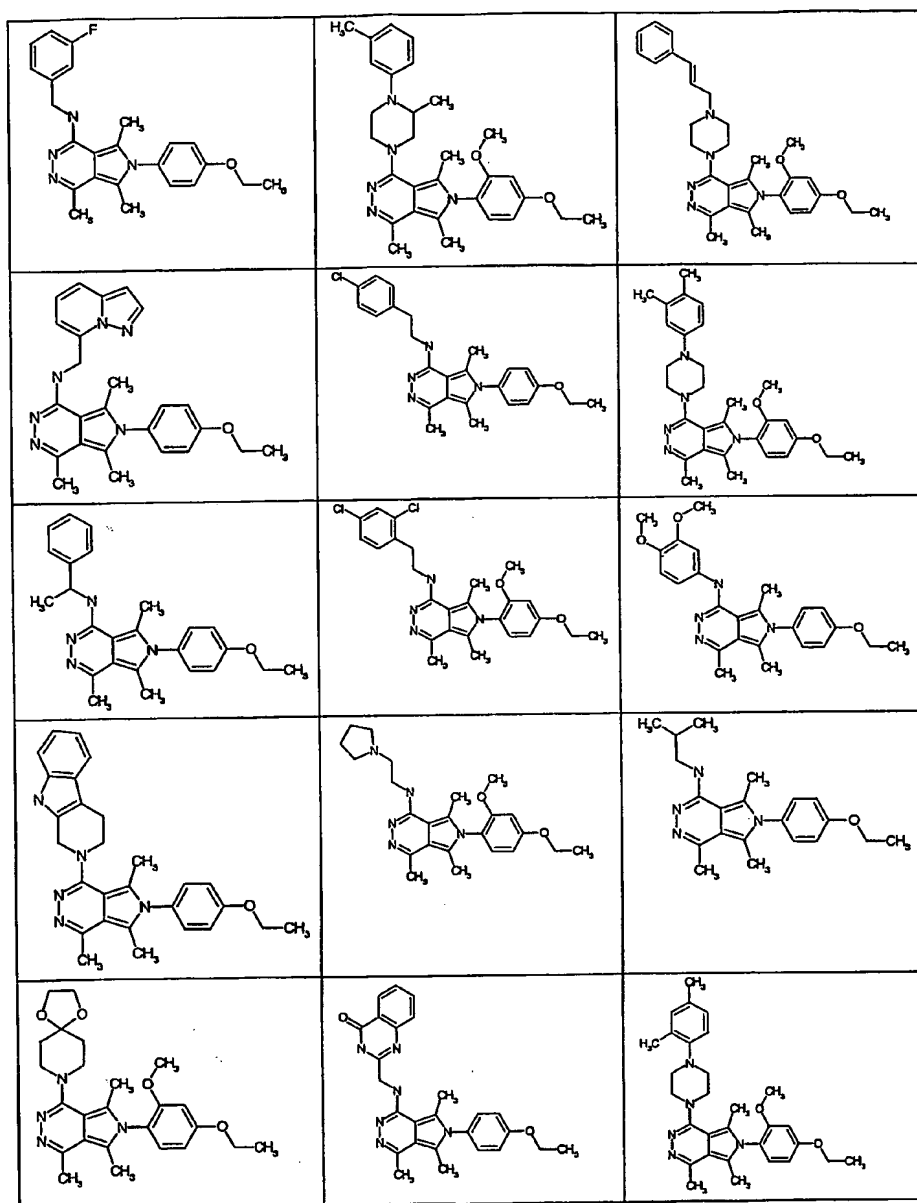


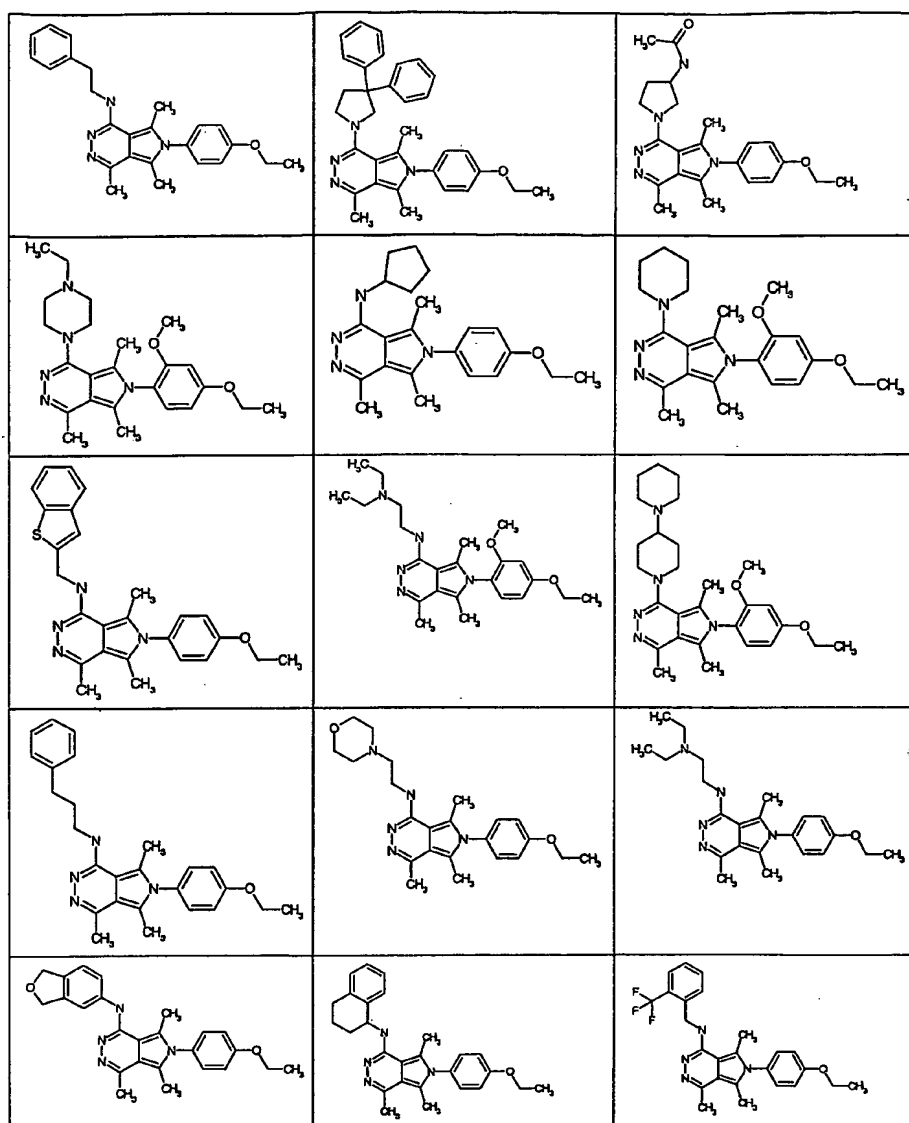


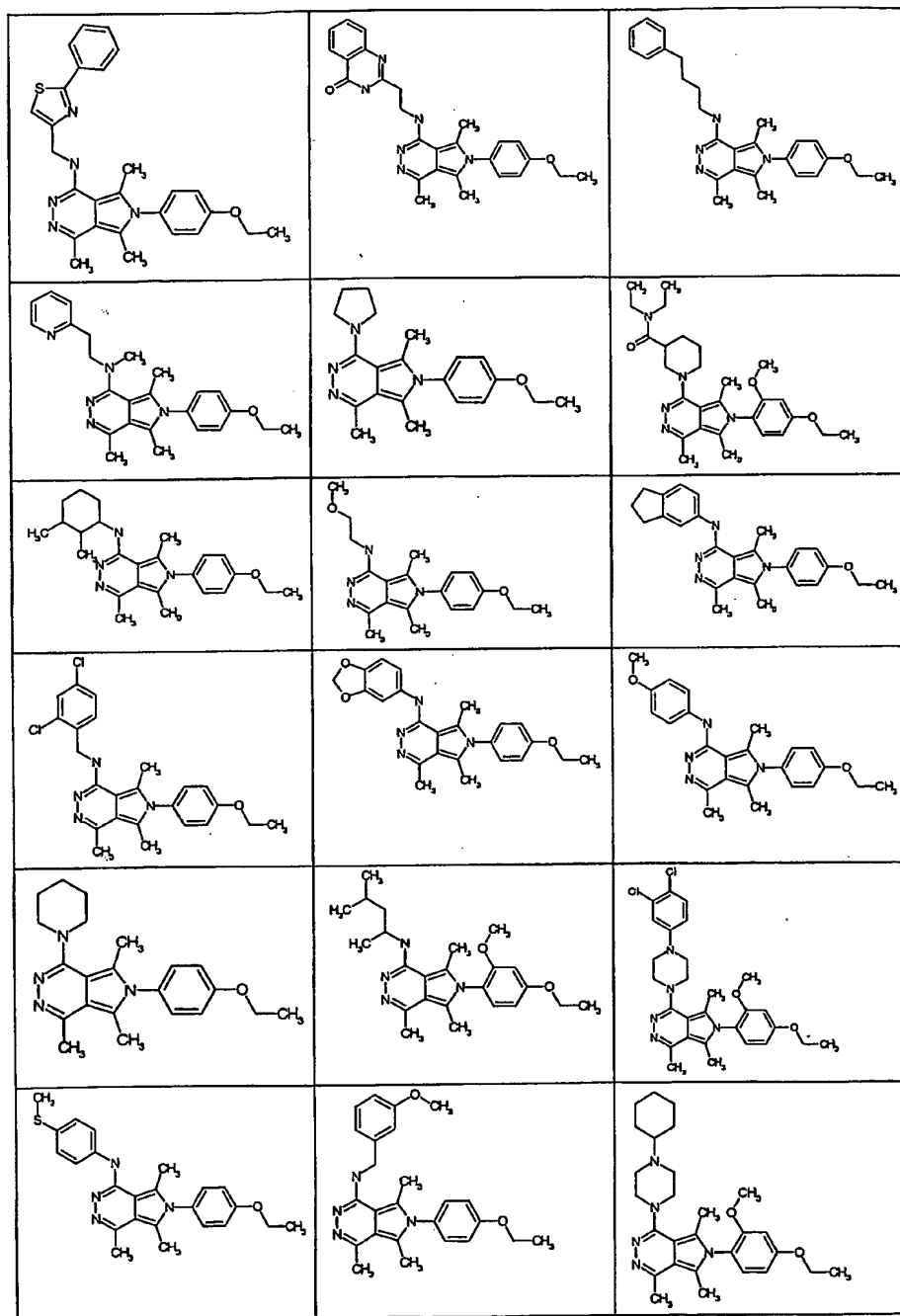


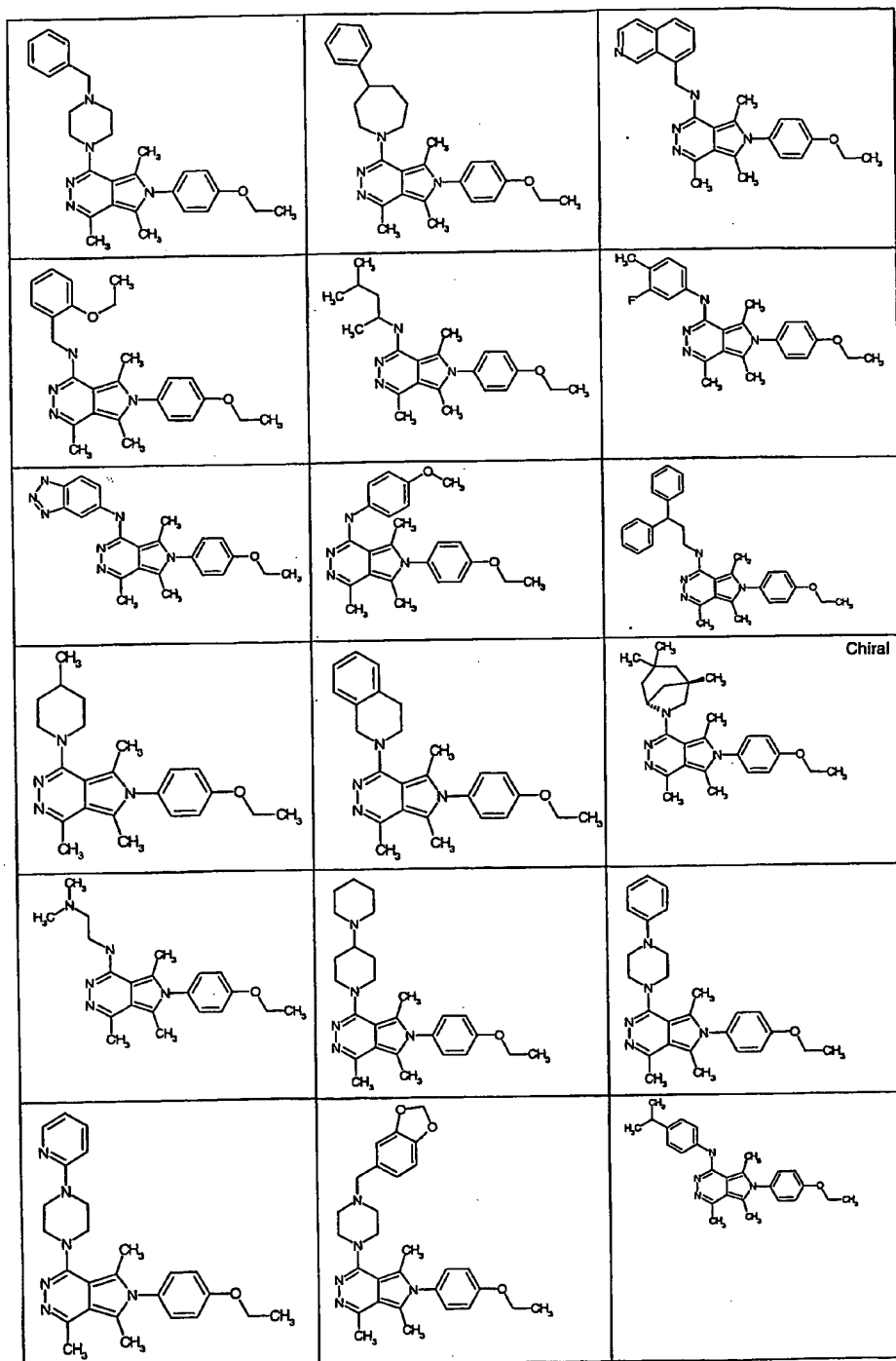




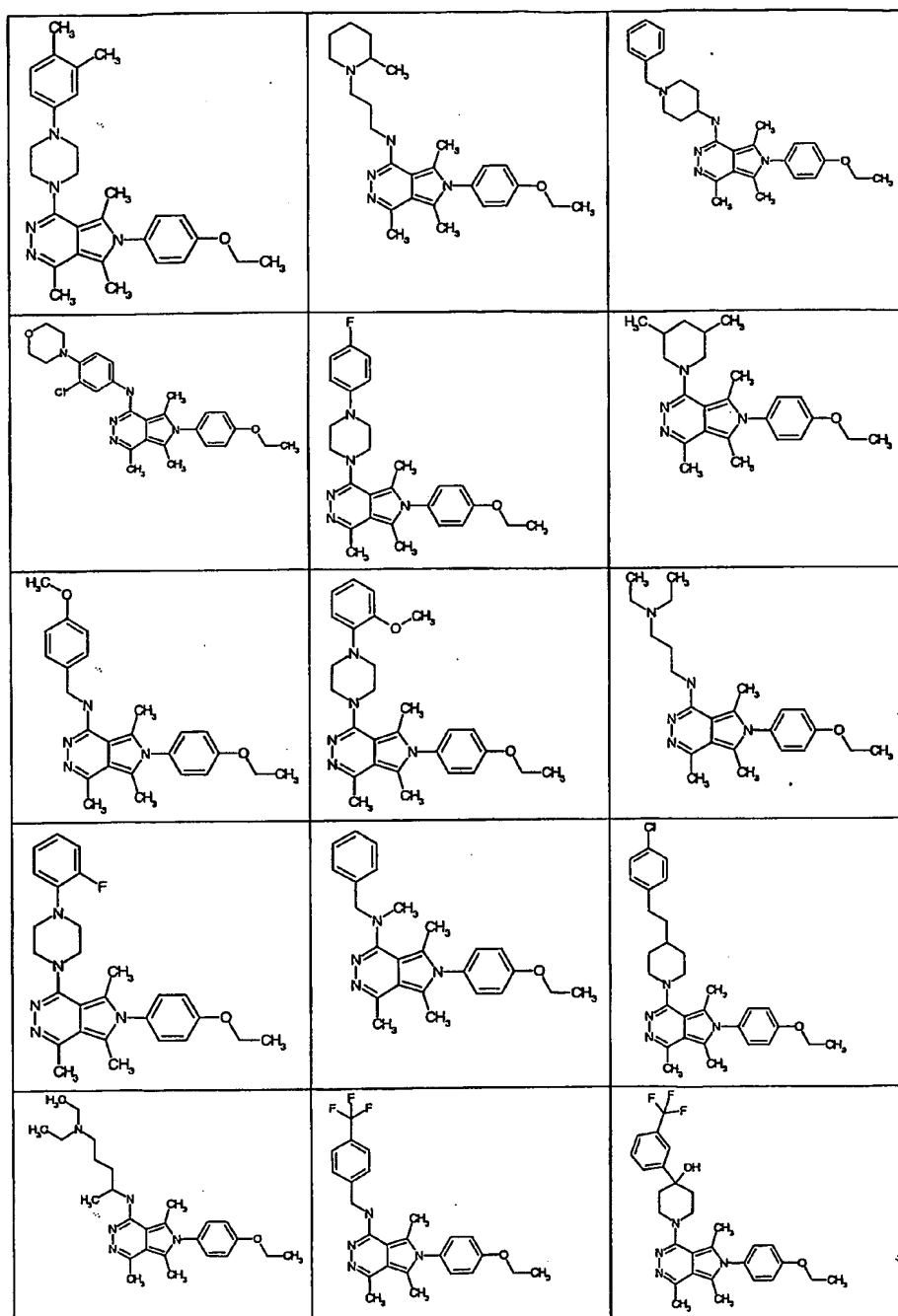


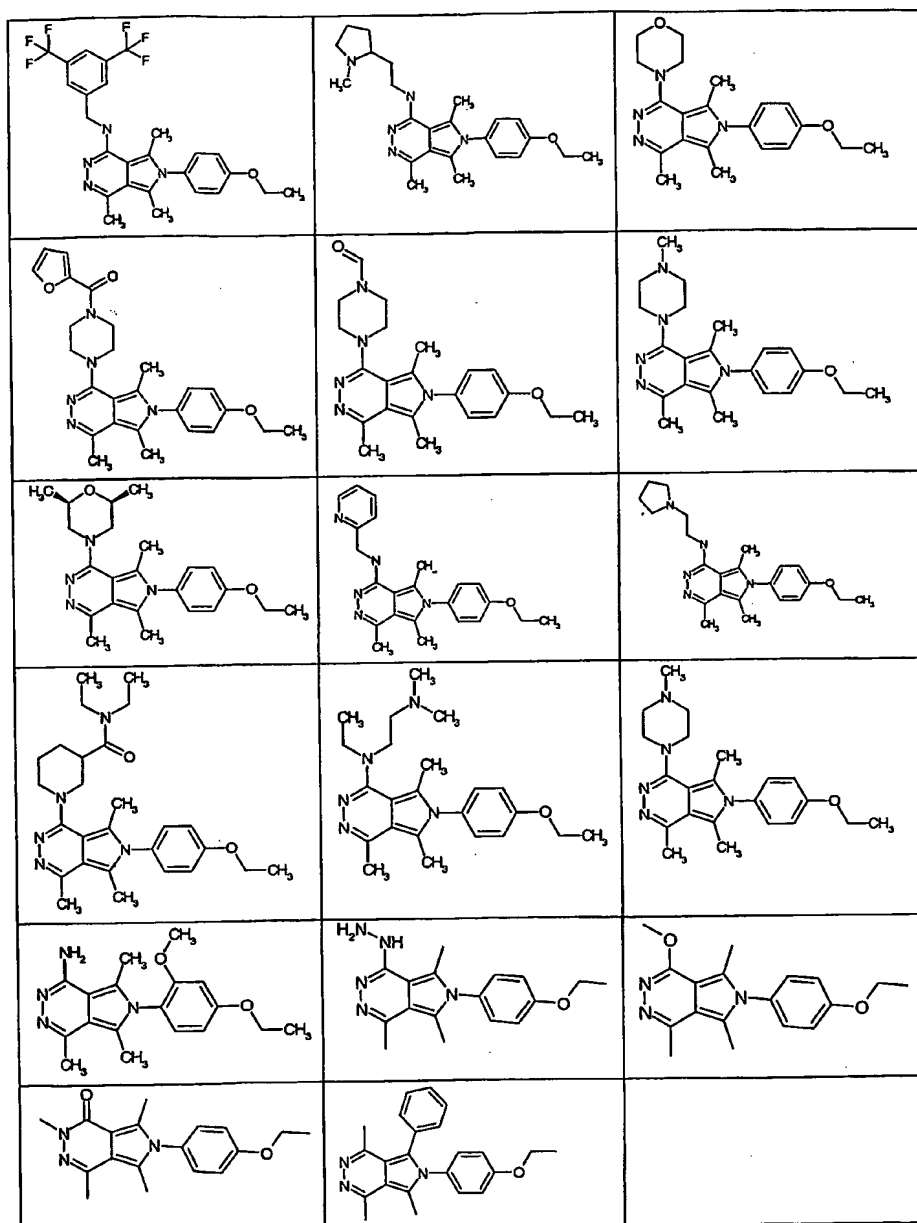






Chiral





or a pharmaceutically acceptable salt thereof.

5. A method of treatment of neuropathic pain comprising a step of administering an effective amount of a pharmaceutical composition comprising:

a therapeutically effective amount of the compound according to claim 1, or a pharmaceutically acceptable salt thereof; and
a pharmaceutically acceptable carrier.

5 6. The method according to claim 5, wherein said composition further comprising i) an opiate agonist, ii) an opiate antagonist, iii) an mGluR5 antagonist, iv) a 5HT receptor agonist, v) a 5HT receptor antagonist, vi) a sodium channel antagonist, vii) an NMDA receptor agonist, viii) an NMDA receptor antagonist, ix) a COX-2 selective inhibitor, x) an NK1 antagonist, xi) a non-steroidal anti-
10 inflammatory drug, xii) a GABA-A receptor modulator, xiii) a dopamine agonist, xiv) a dopamine antagonist, xv) a selective serotonin reuptake inhibitor, xvi) a tricyclic antidepressant drug, xvii) a norepinephrine modulator, xviii) L-DOPA, xix) buspirone, xx) a lithium salt, xxi) valproate, xxii) neurontin, xxiii) olanzapine, xxiv) a
15 muscarinic agonist, xxv) a nicotinic antagonist, xxvi) a muscarinic agonist, xxvii) a muscarinic antagonist, xxviii) a selective serotonin and norepinephrine reuptake inhibitor (SSNRI), xxix) a heroin substituting drug, xxx) disulfiram, or xxxi) acamprosate.

20 7. The method according to claim 6, wherein said heroin substituting drug is methadone, levo-alpha-acetylmethadol, buprenorphine or naltrexone.

25 8. A method of treatment or prevention of pain comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

30 9. A method of treatment or prevention of a pain disorder wherein said pain disorder is acute pain, persistent pain, chronic pain, inflammatory pain, or neuropathic pain, comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

35 10. A method of treatment or prevention of anxiety, depression, bipolar disorder, psychosis, drug withdrawal, tobacco withdrawal, memory loss, cognitive impairment, dementia, Alzheimer's disease, schizophrenia or panic comprising the

step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

- 5 11. A method of treatment or prevention of disorders of
extrapyramidal motor function comprising the step of administering a therapeutically
effective amount, or a prophylactically effective amount, of the compound according
to claim 1 or a pharmaceutically acceptable salt thereof.
- 10 12. The method of claim 11 wherein said disorder of extrapyramidal
motor function is Parkinson's disease, progressive supramuscular palsy, Huntington's
disease, Gilles de la Tourette syndrome, or tardive dyskinesia.
- 15 13. A method of treatment or prevention of anxiety disorders
comprising the step of administering a therapeutically effective amount, or a
prophylactically effective amount, of the compound according to claim 1 or a
pharmaceutically acceptable salt thereof.
- 20 14. The method of claim 13 wherein said anxiety disorder is panic
attack, agoraphobia or specific phobias, obsessive-compulsive disorders, post-
traumatic stress disorder, acute stress disorder, generalized anxiety disorder, eating
disorder, substance-induced anxiety disorder, or nonspecified anxiety disorder.
- 25 15. A method of treatment or prevention of neuropathic pain
comprising the step of administering a therapeutically effective amount, or a
prophylactically effective amount, of the compound according to claim 1 or a
pharmaceutically acceptable salt thereof.
- 30 16. A method of treatment or prevention of Parkinson's Disease
comprising the step of administering a therapeutically effective amount, or a
prophylactically effective amount, of the compound according to claim 1 or a
pharmaceutically acceptable salt thereof.
- 35 17. A method of treatment or prevention of depression comprising the
step of administering a therapeutically effective amount, or a prophylactically

effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

18. A method of treatment or prevention of epilepsy comprising the
5 step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

19. A method of treatment or prevention of inflammatory pain
10 comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

20. A method of treatment or prevention of cognitive dysfunction
15 comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

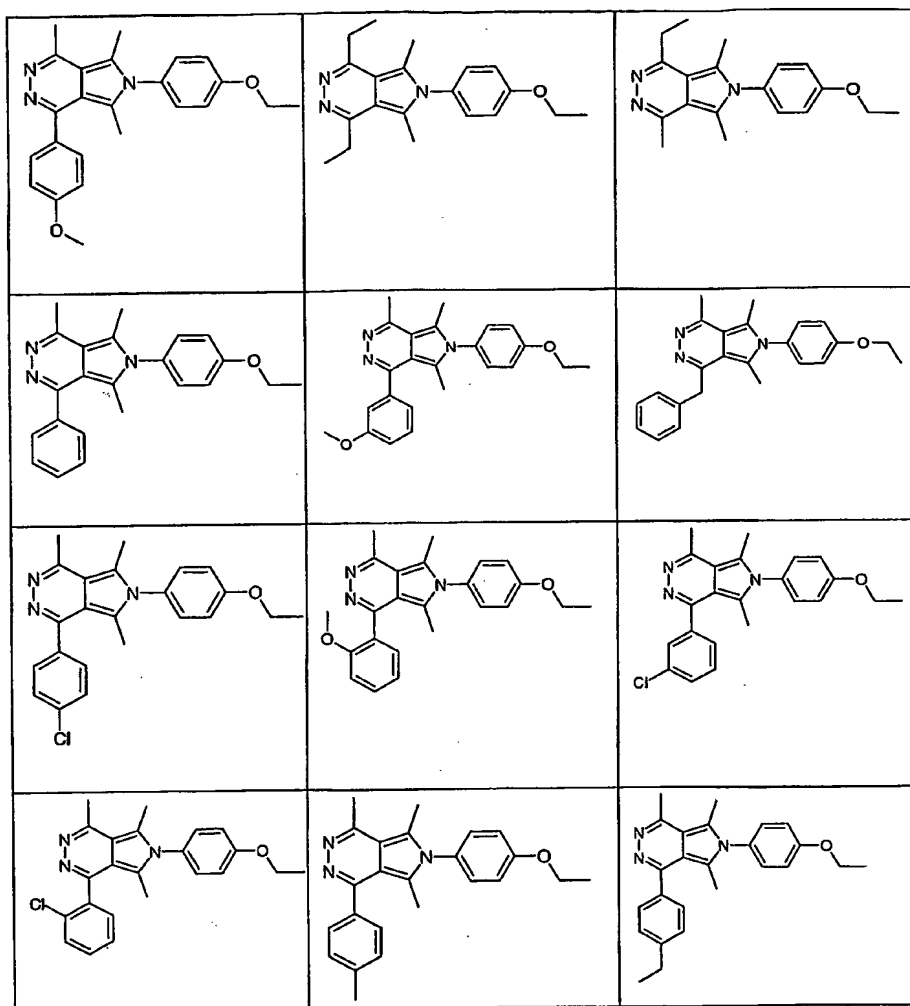
21. A method of treatment or prevention of drug addiction, drug abuse
20 and drug withdrawal comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

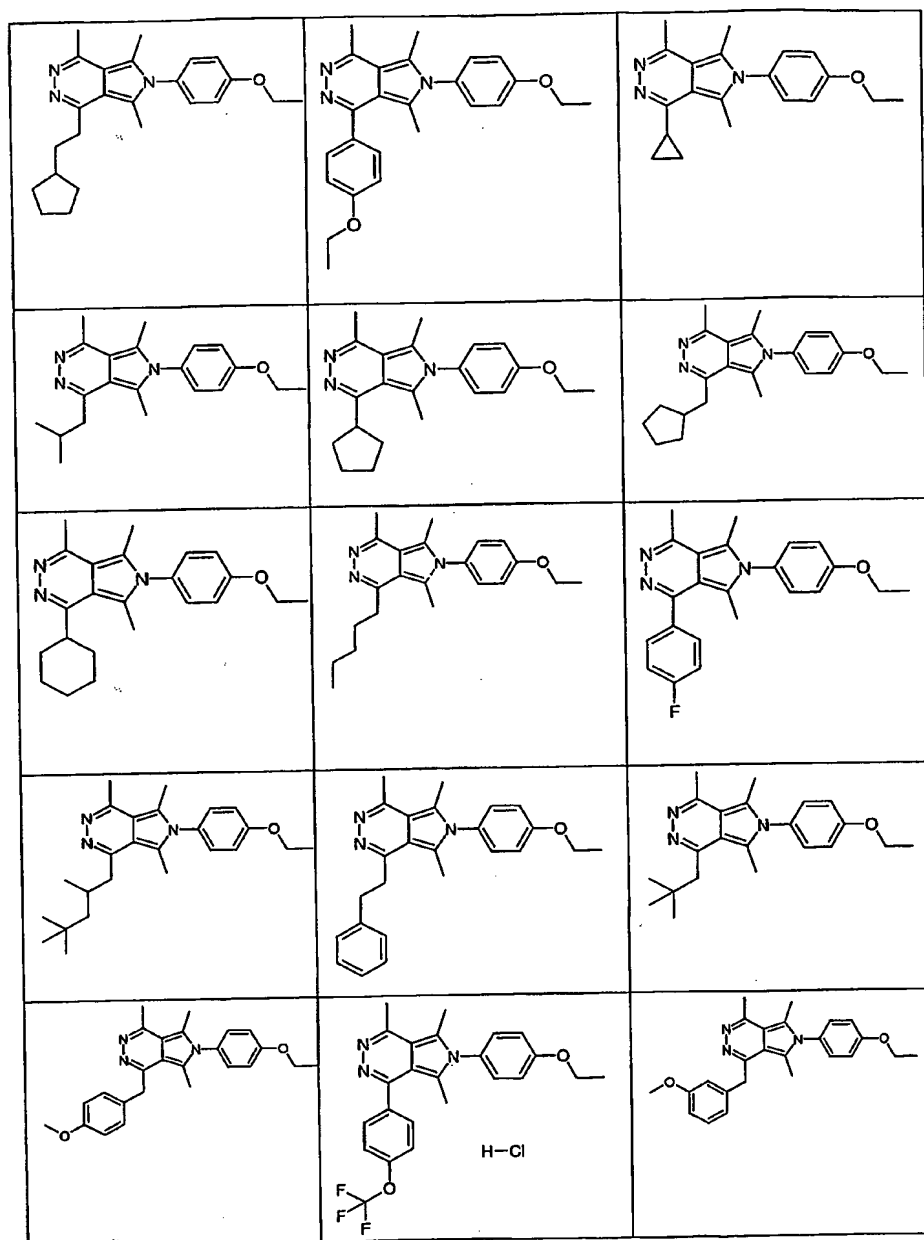
22. A method of treatment or prevention of bipolar disorders
25 comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

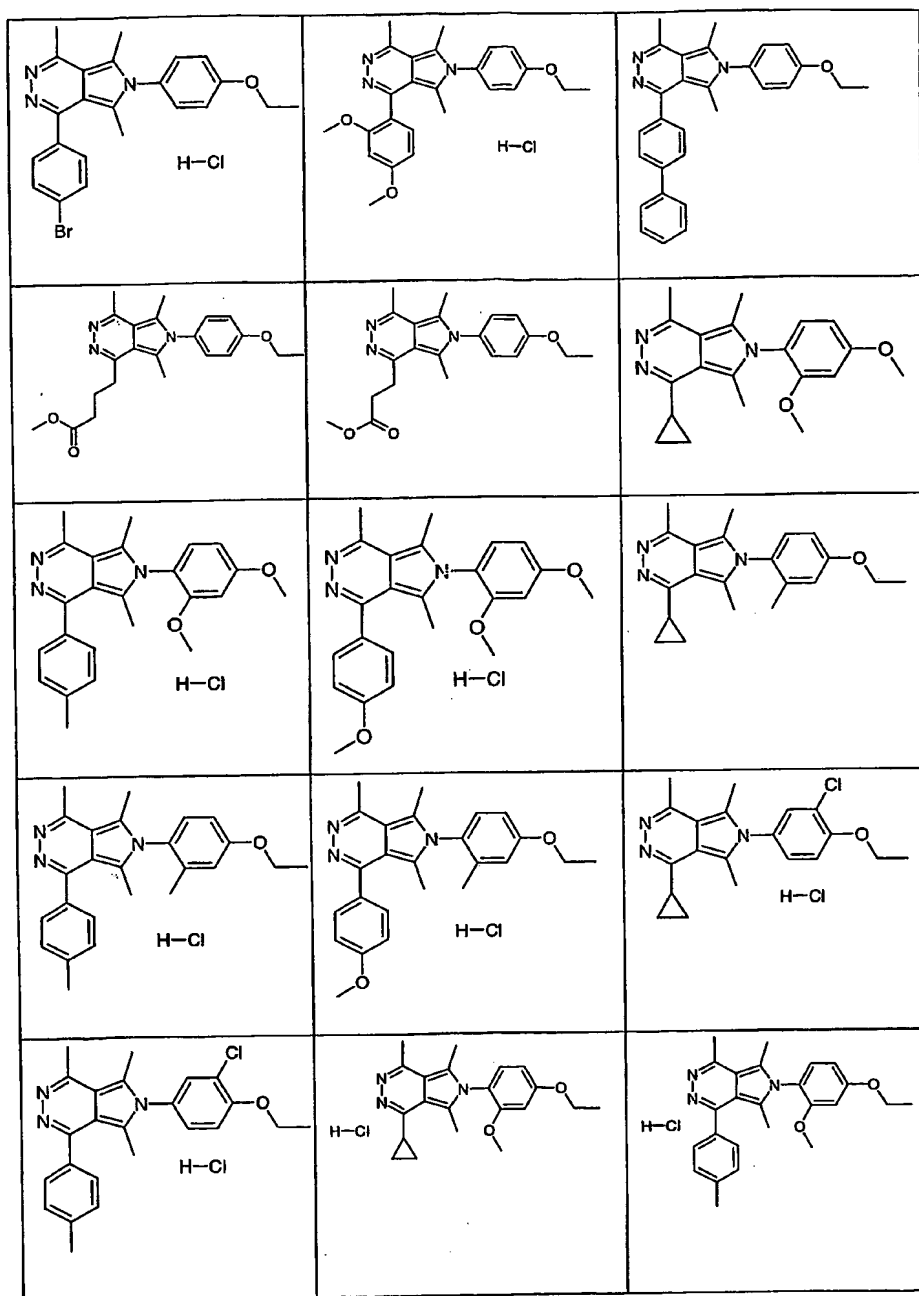
23. A method of treatment or prevention of circadian rhythm and sleep
30 disorders comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

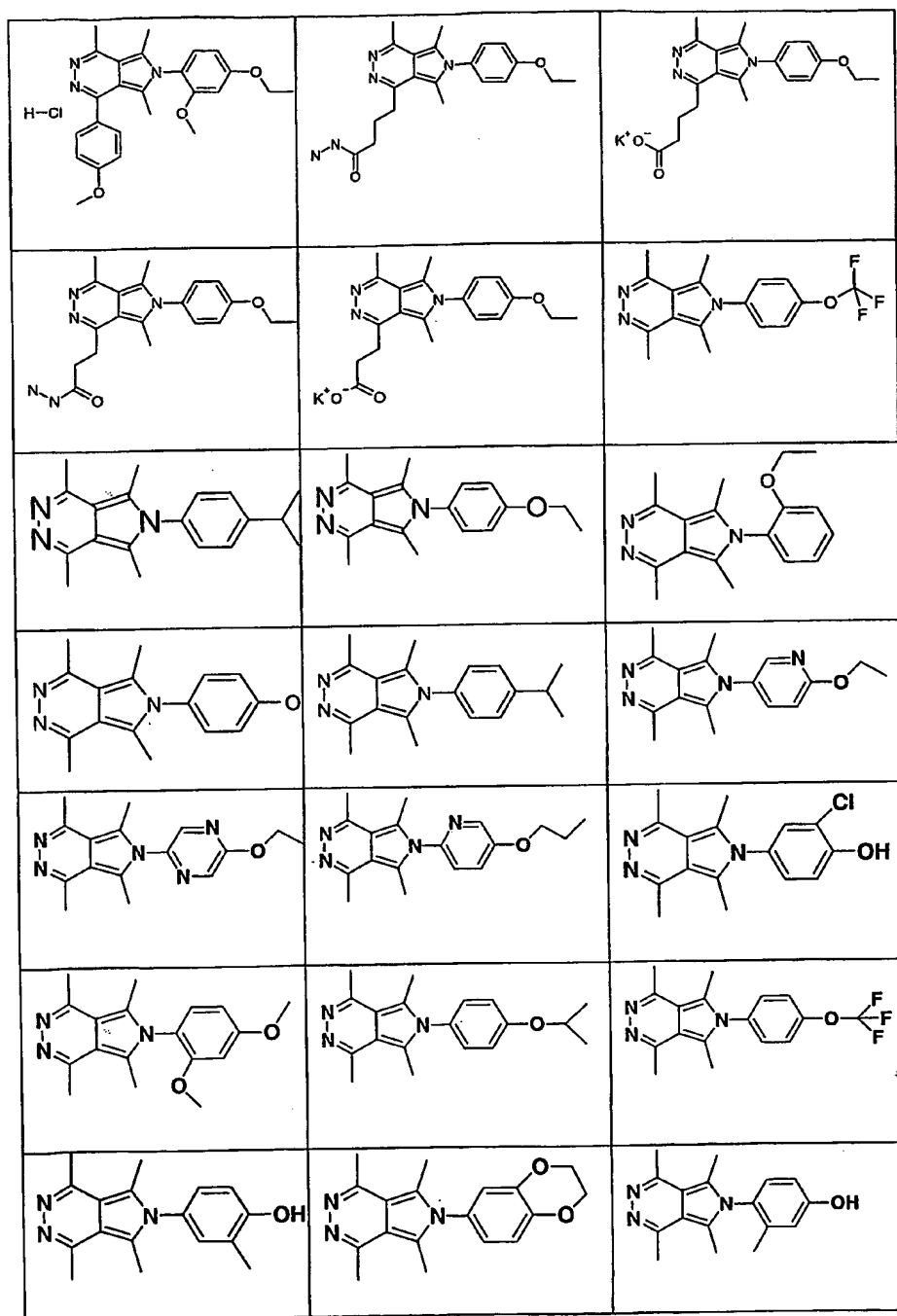
24. The method of Claim 23 wherein the circadian rhythm and sleep
35 disorders are shift-work induced sleep disorder or jet-lag.

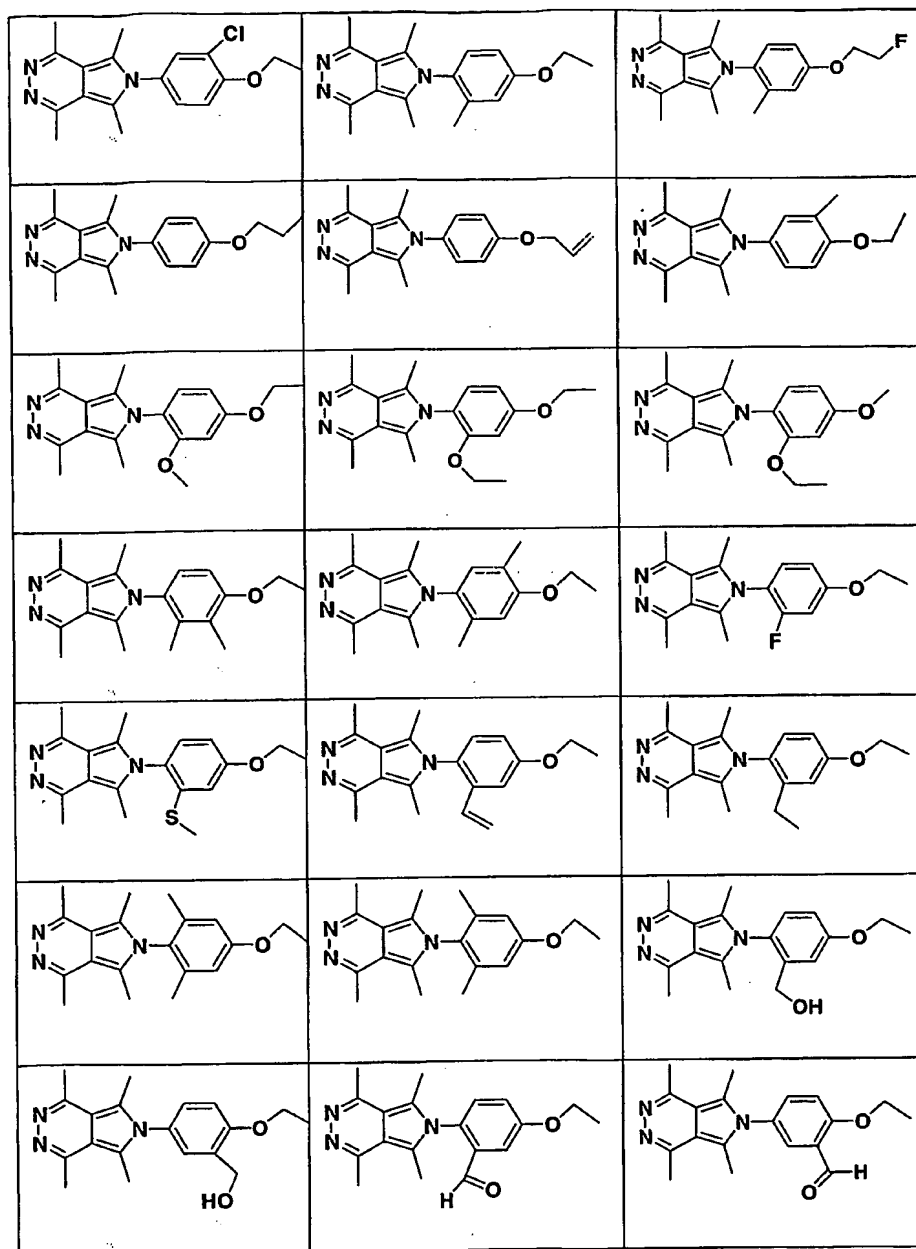
25. A compound selected from:

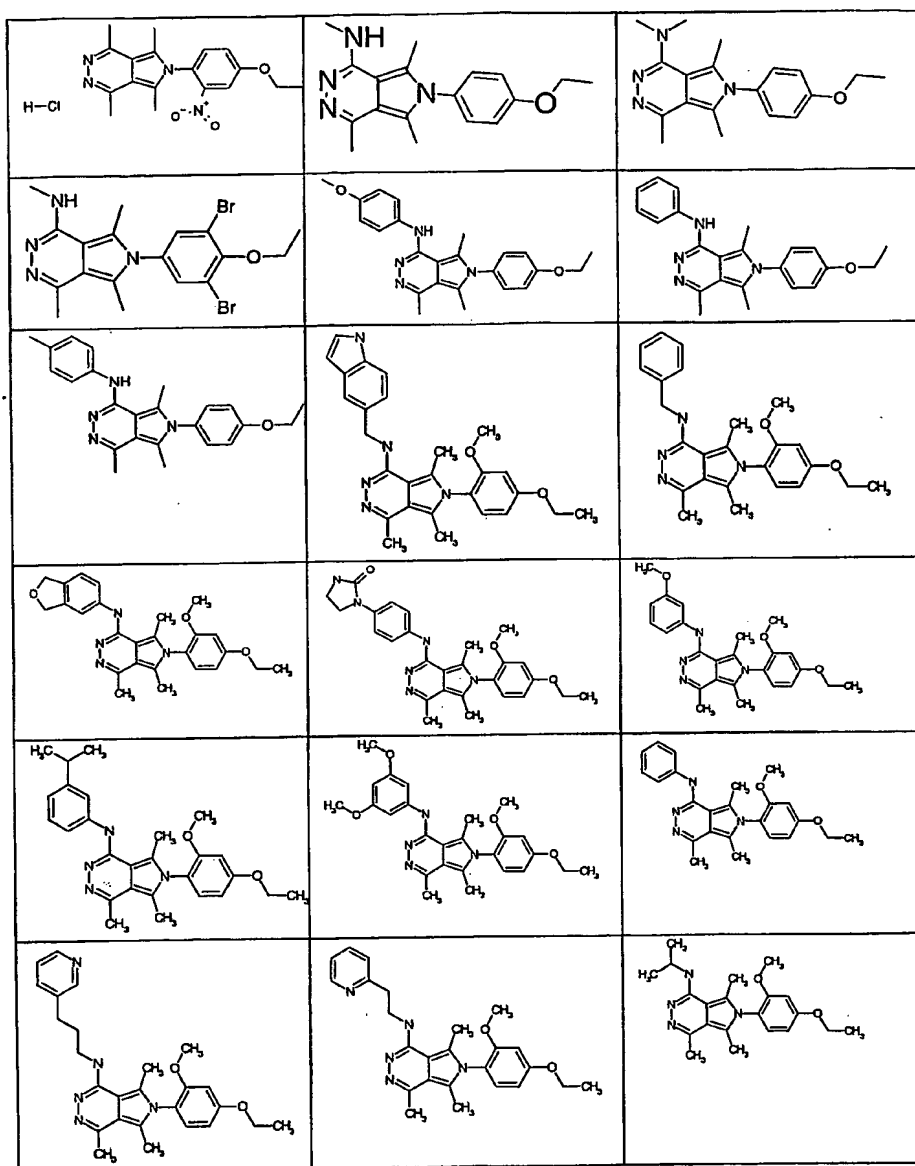


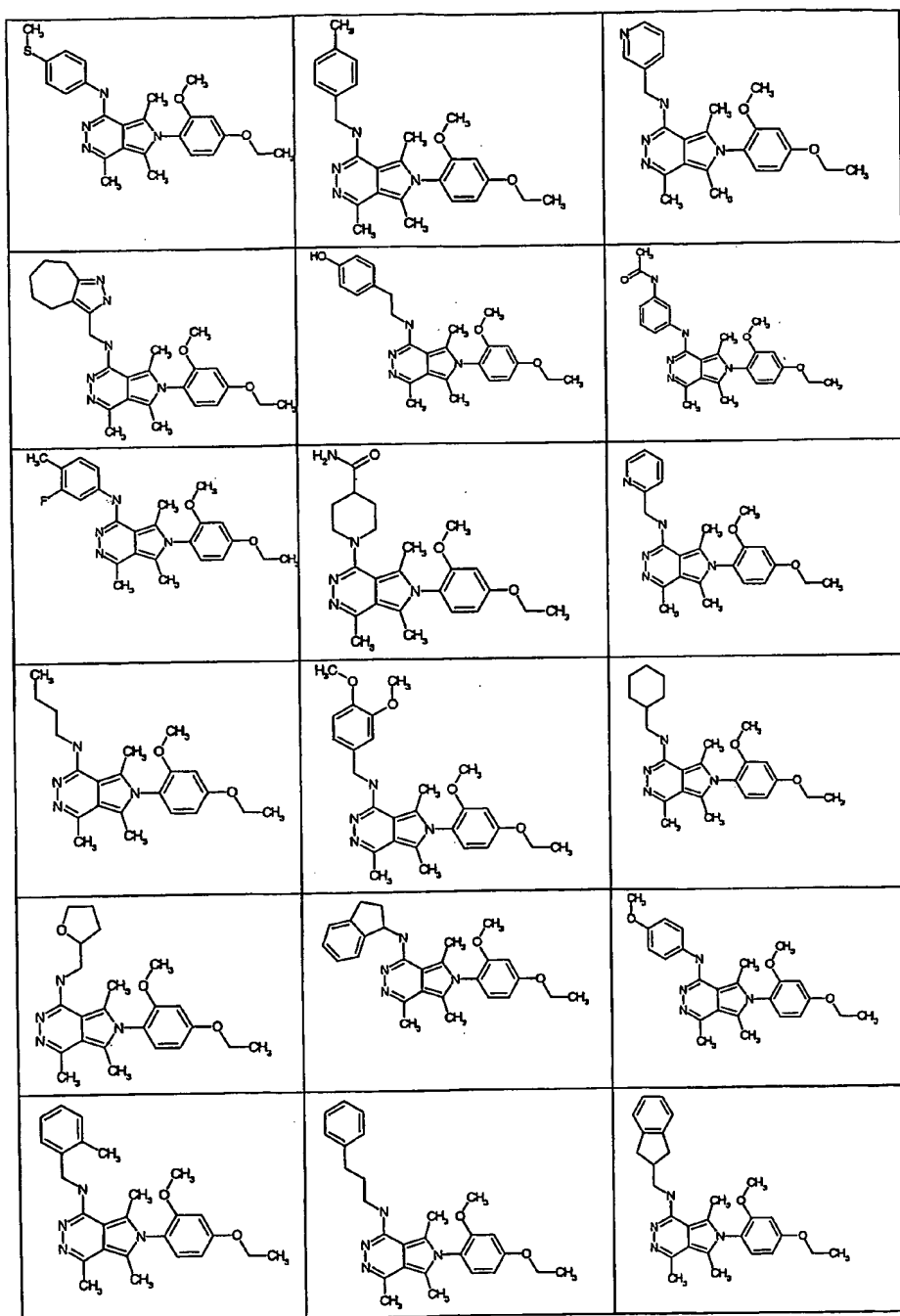


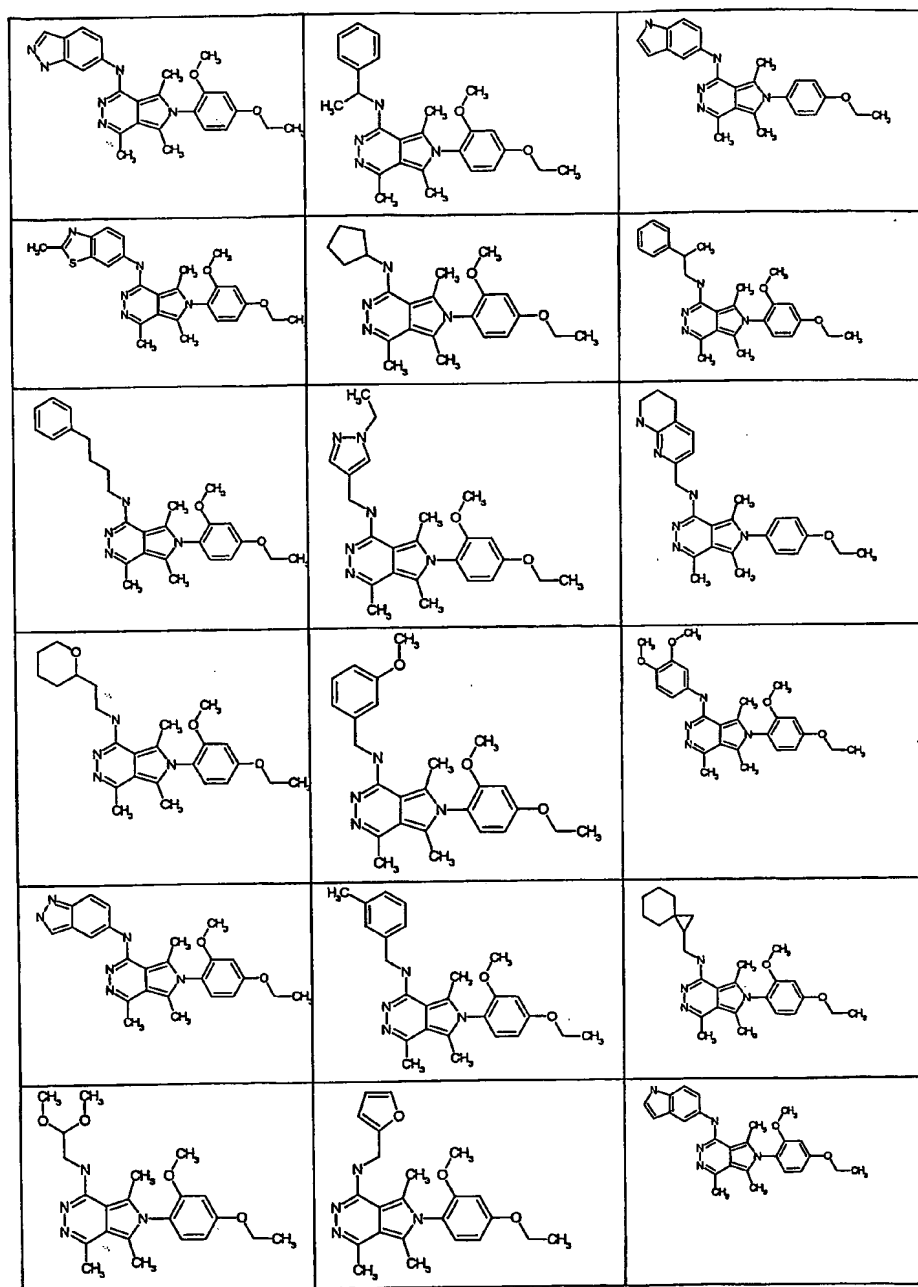


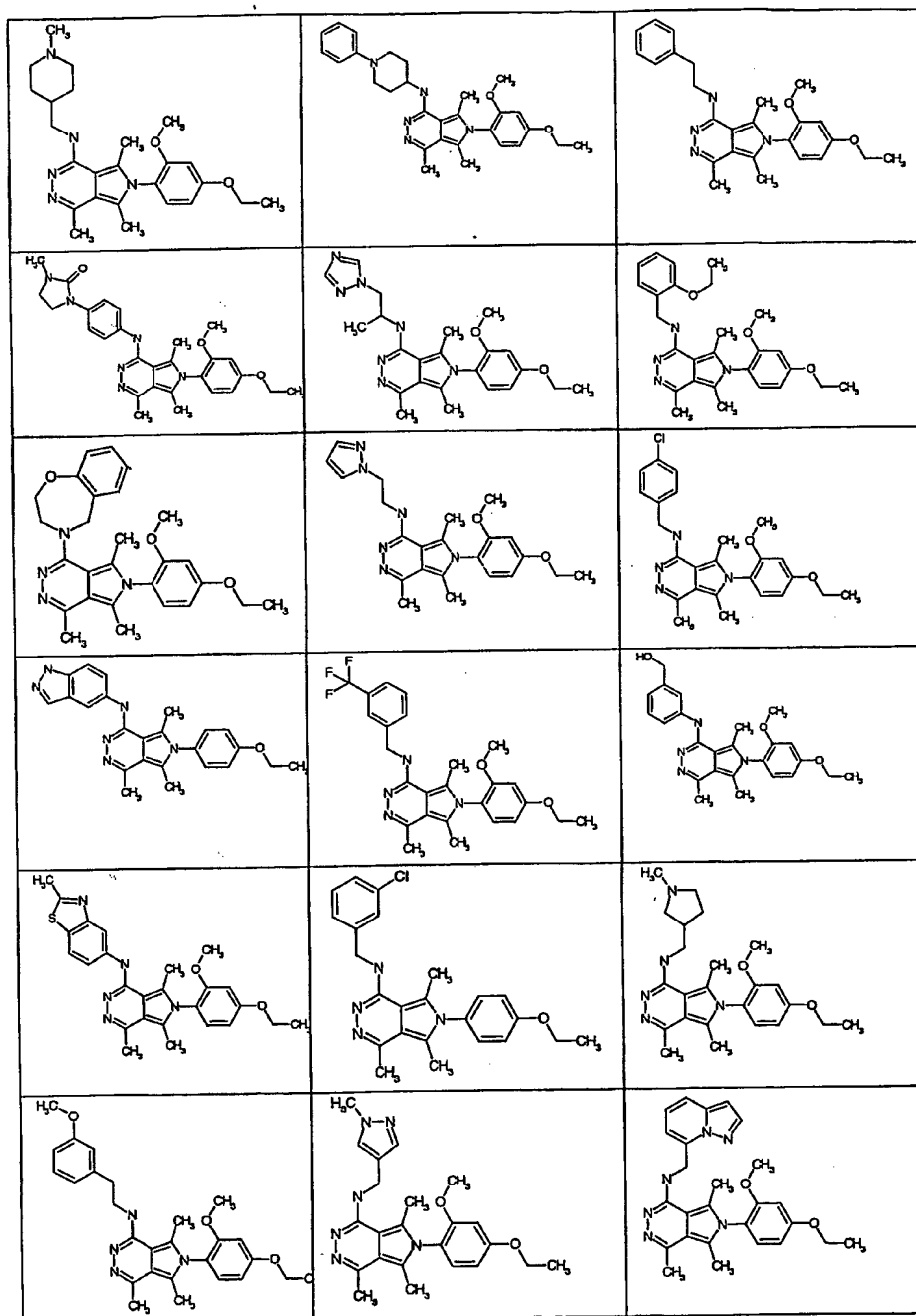


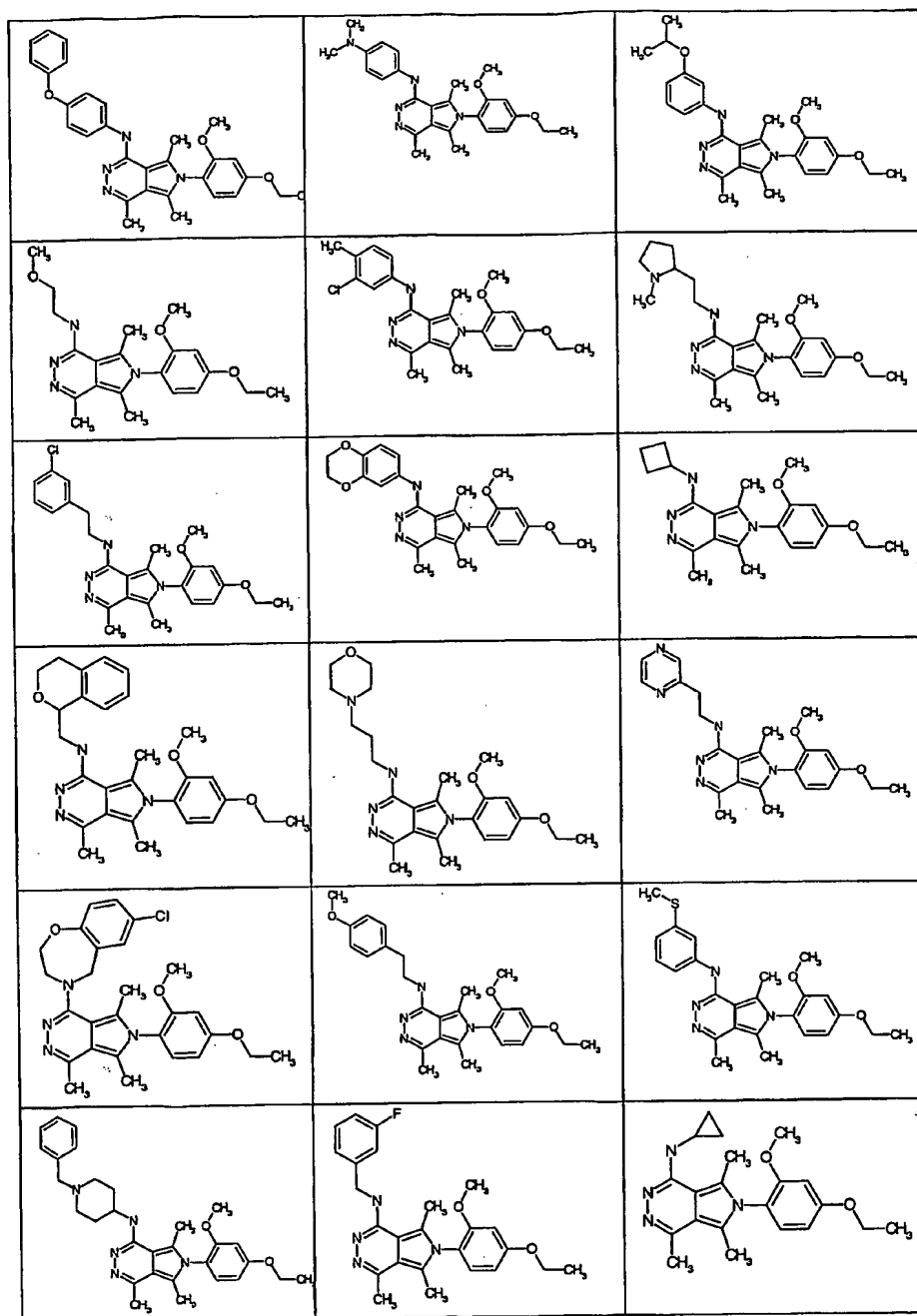


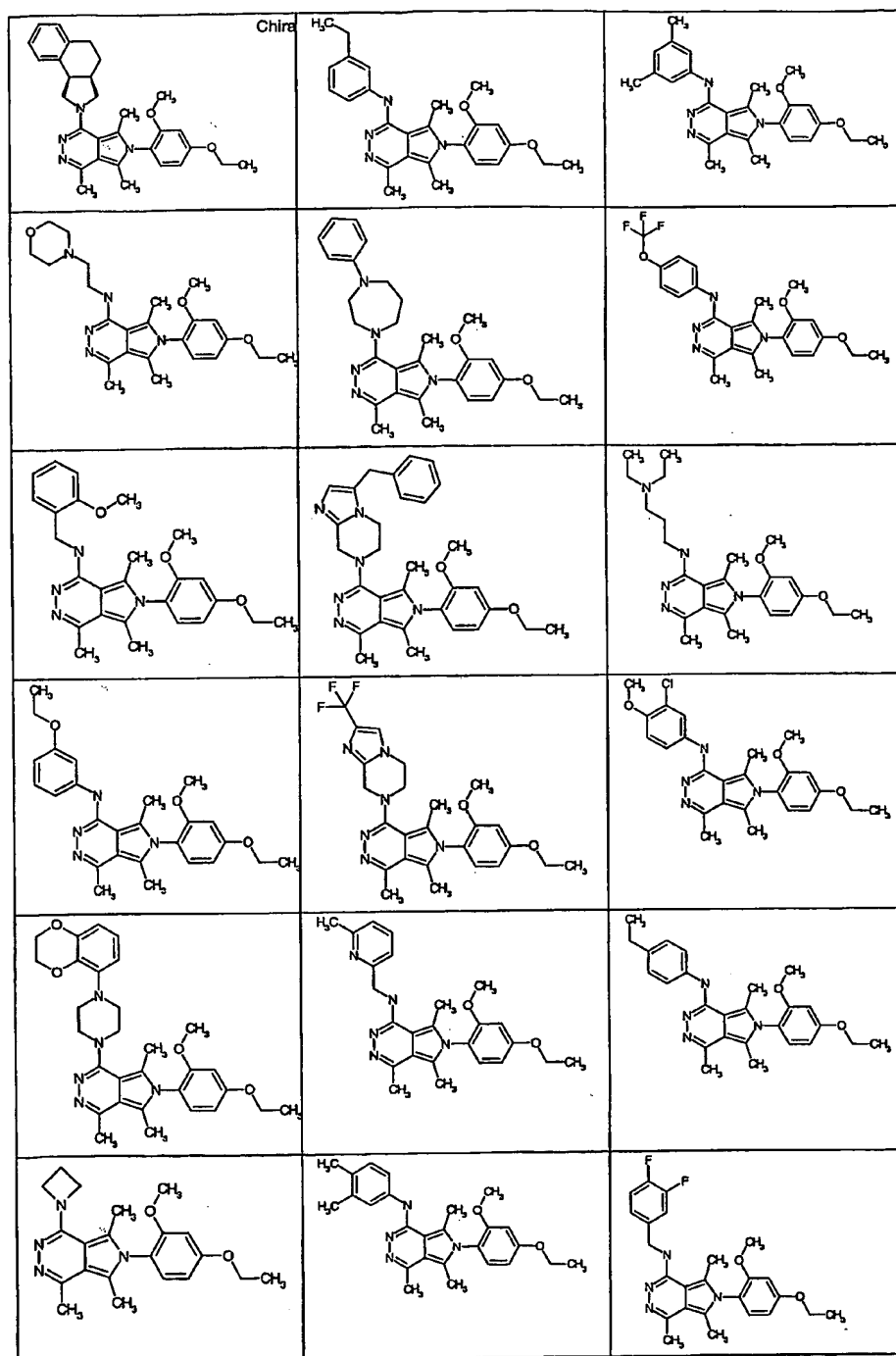


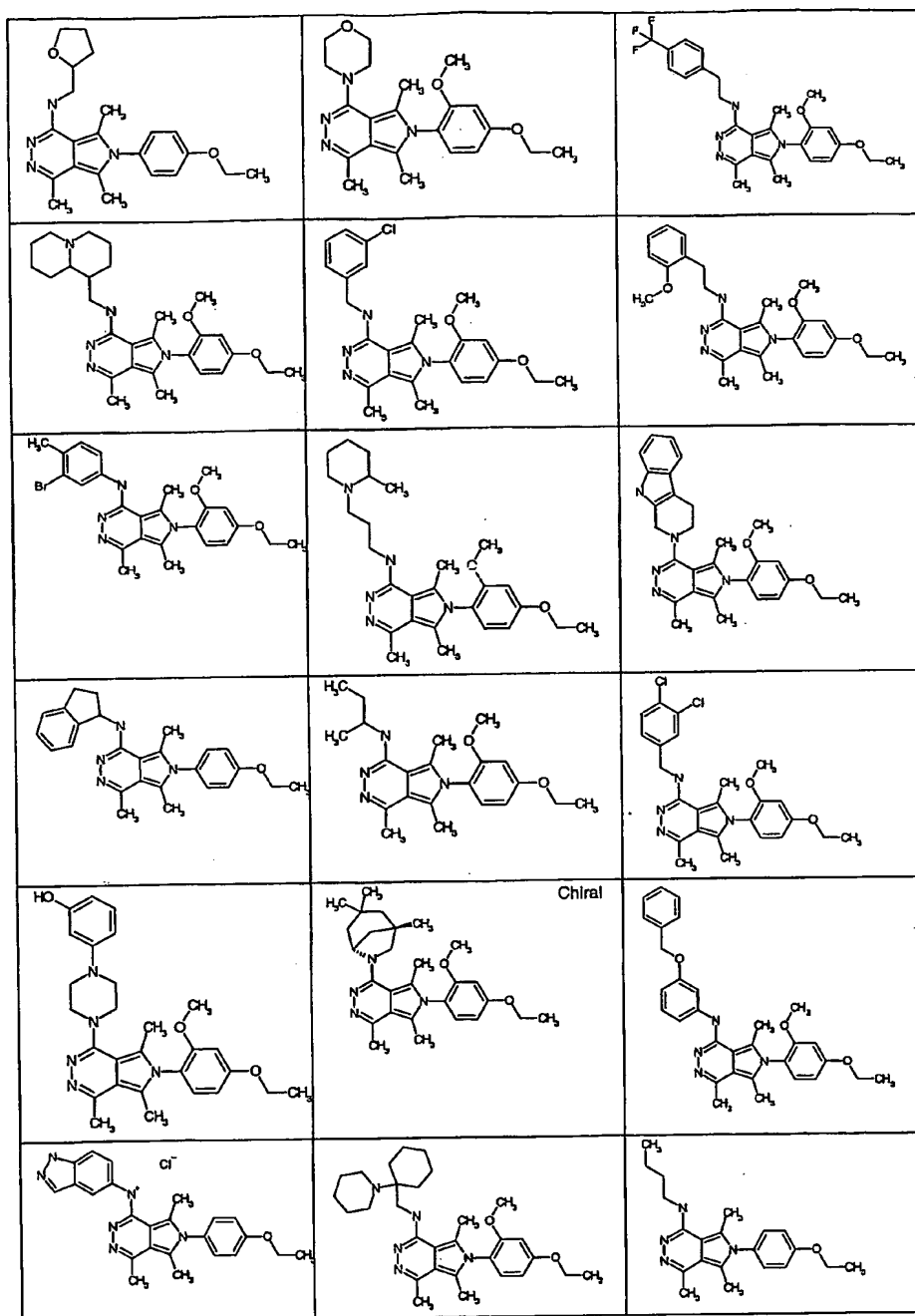


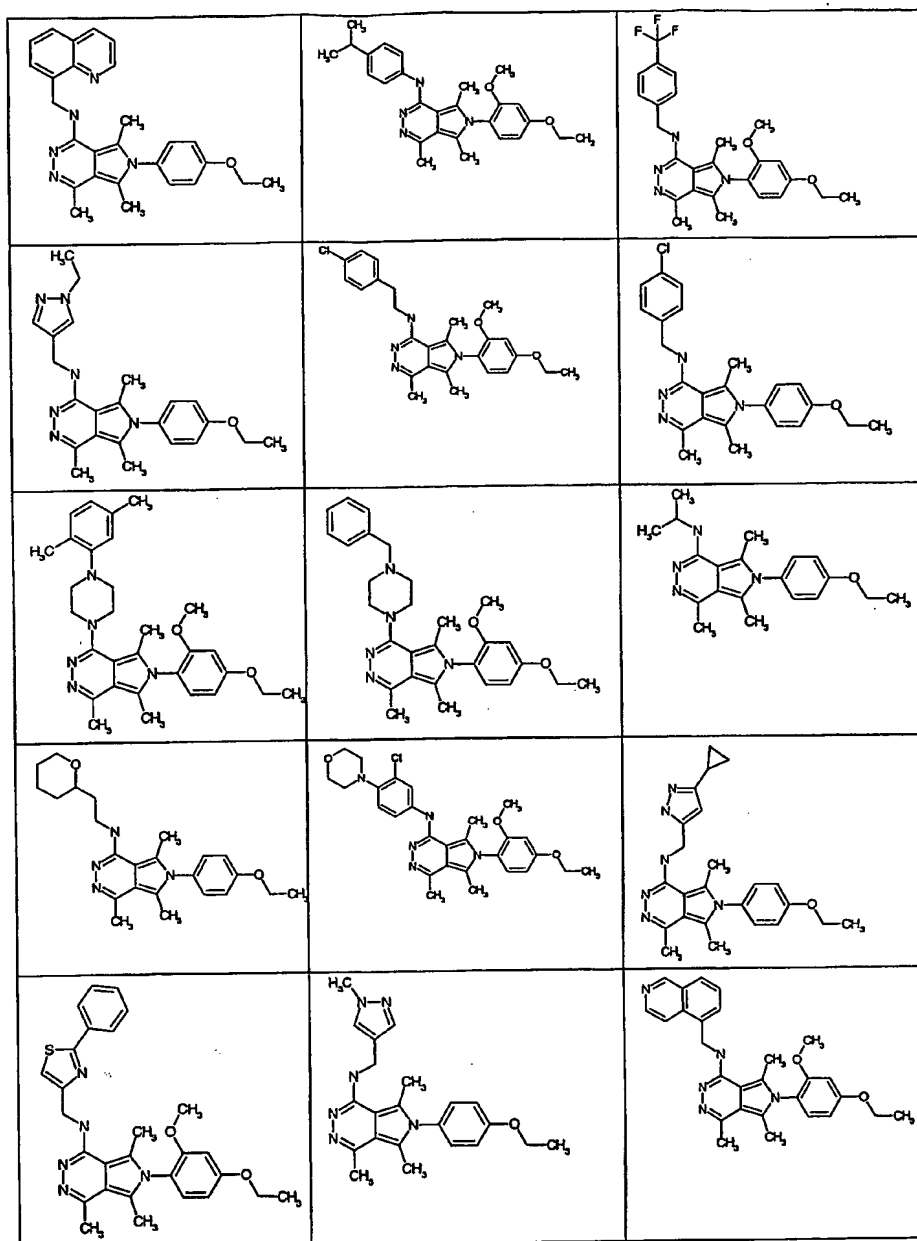


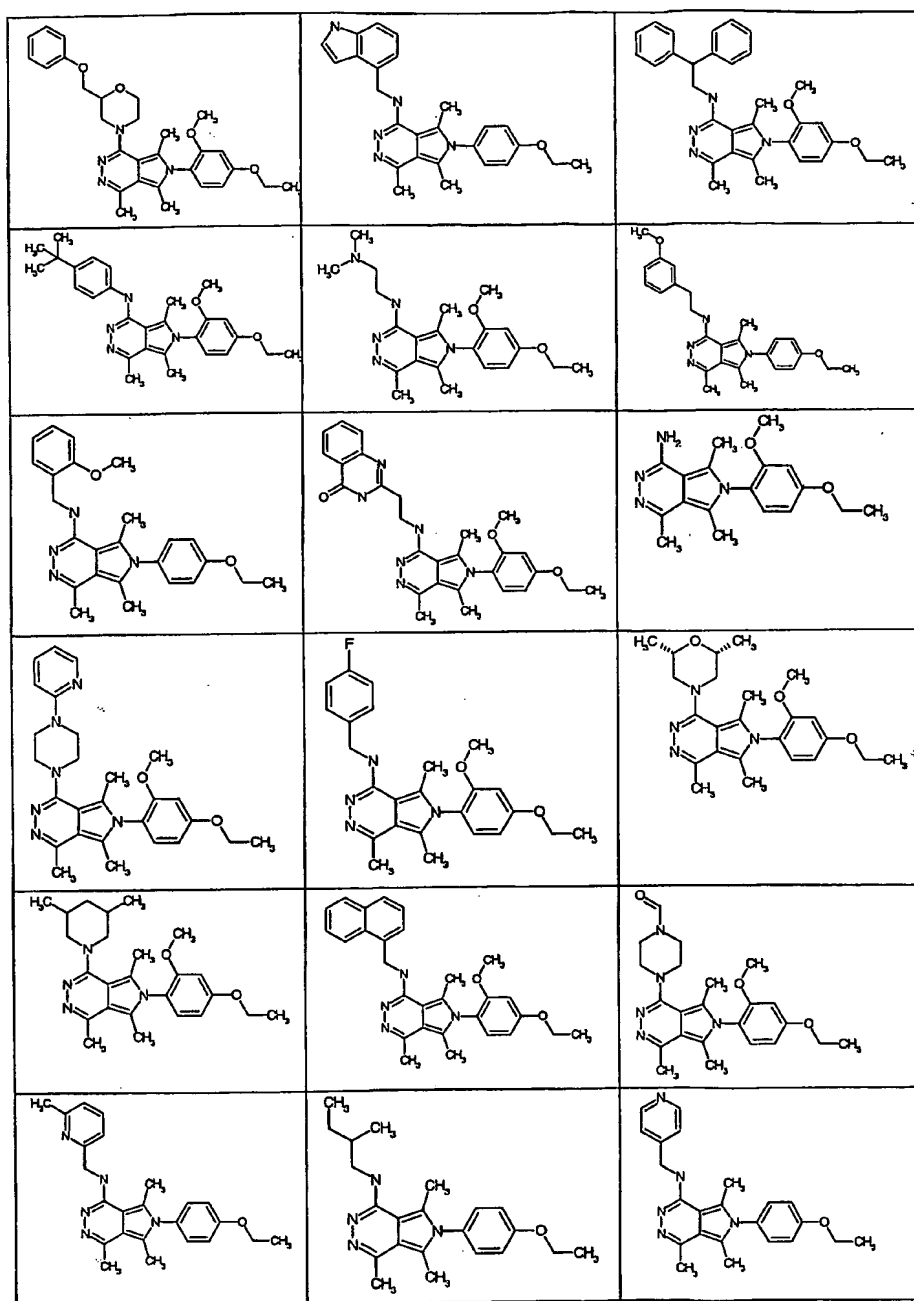


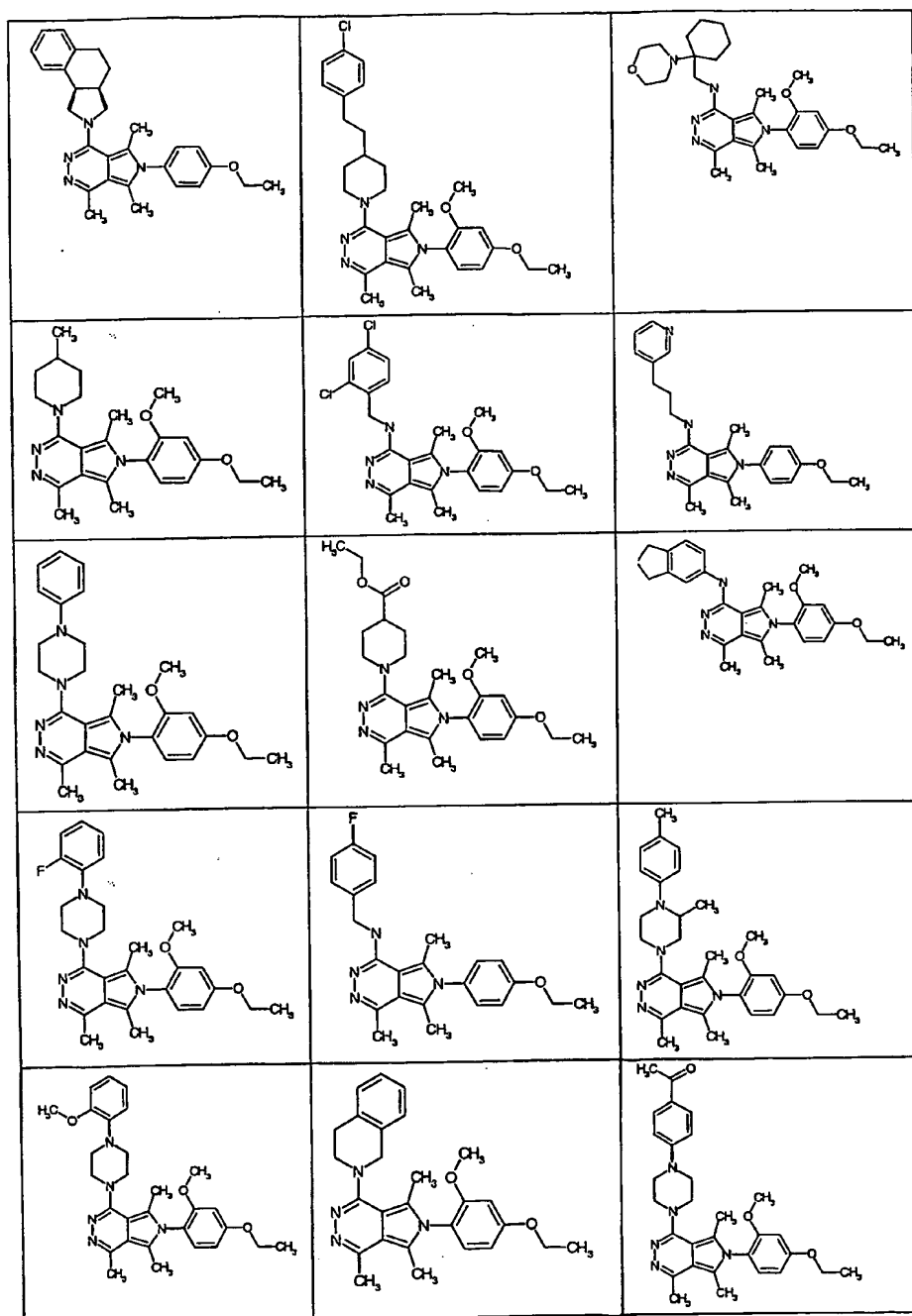


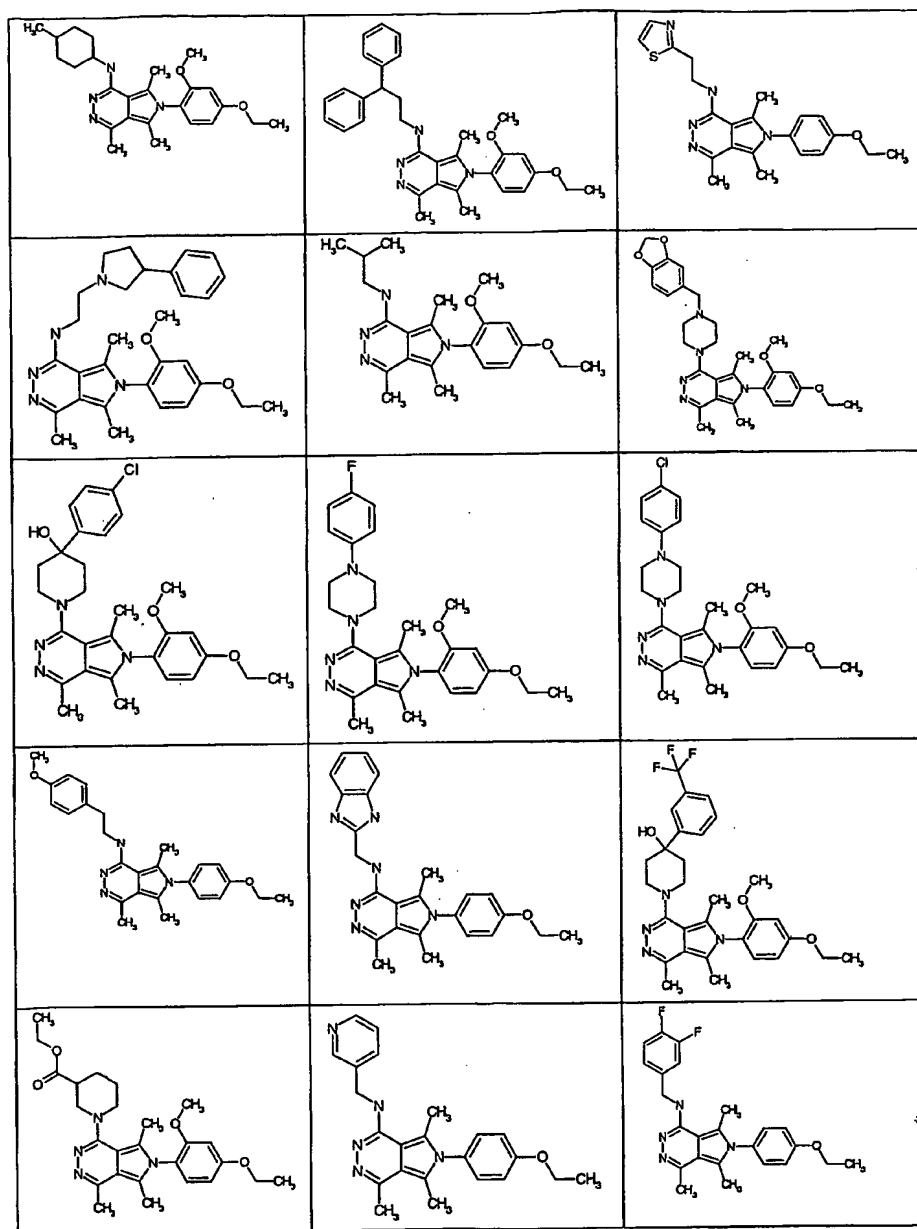


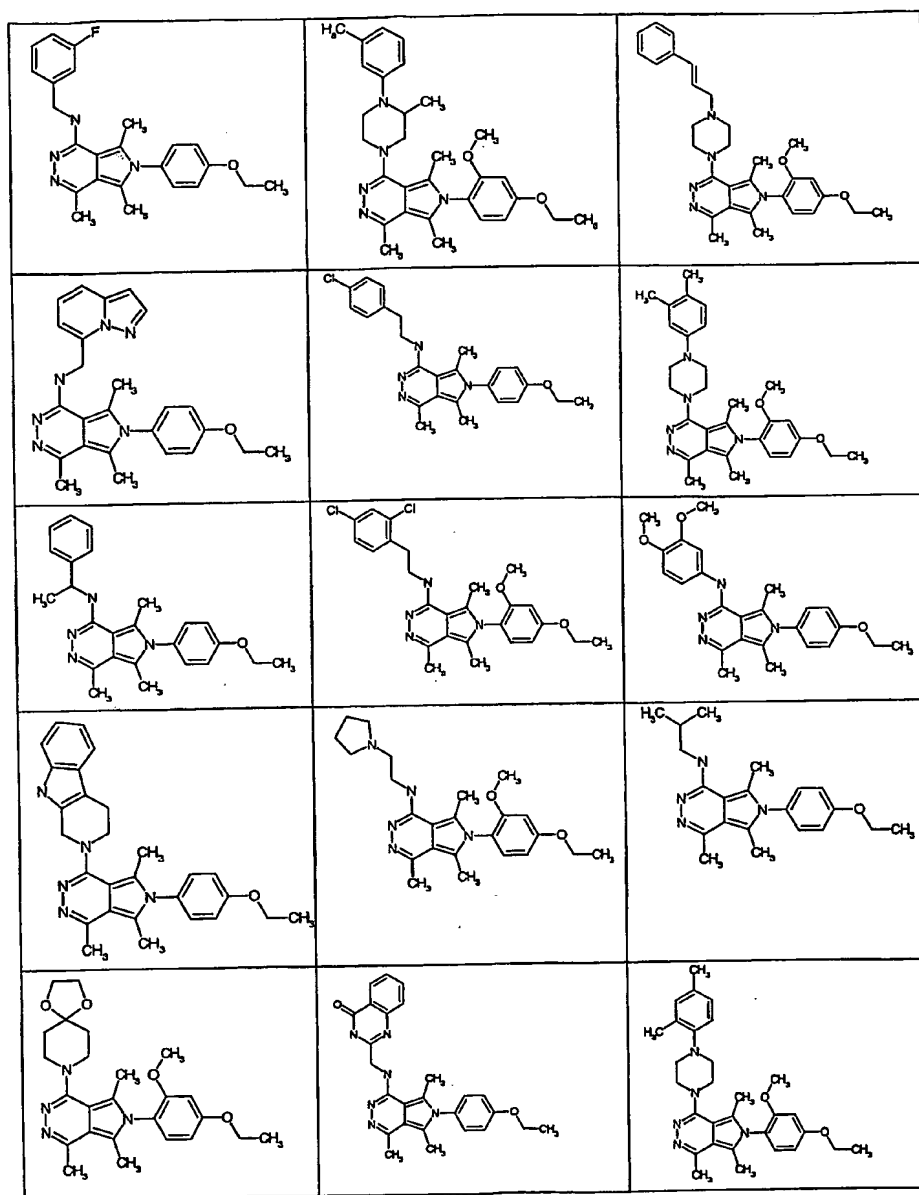


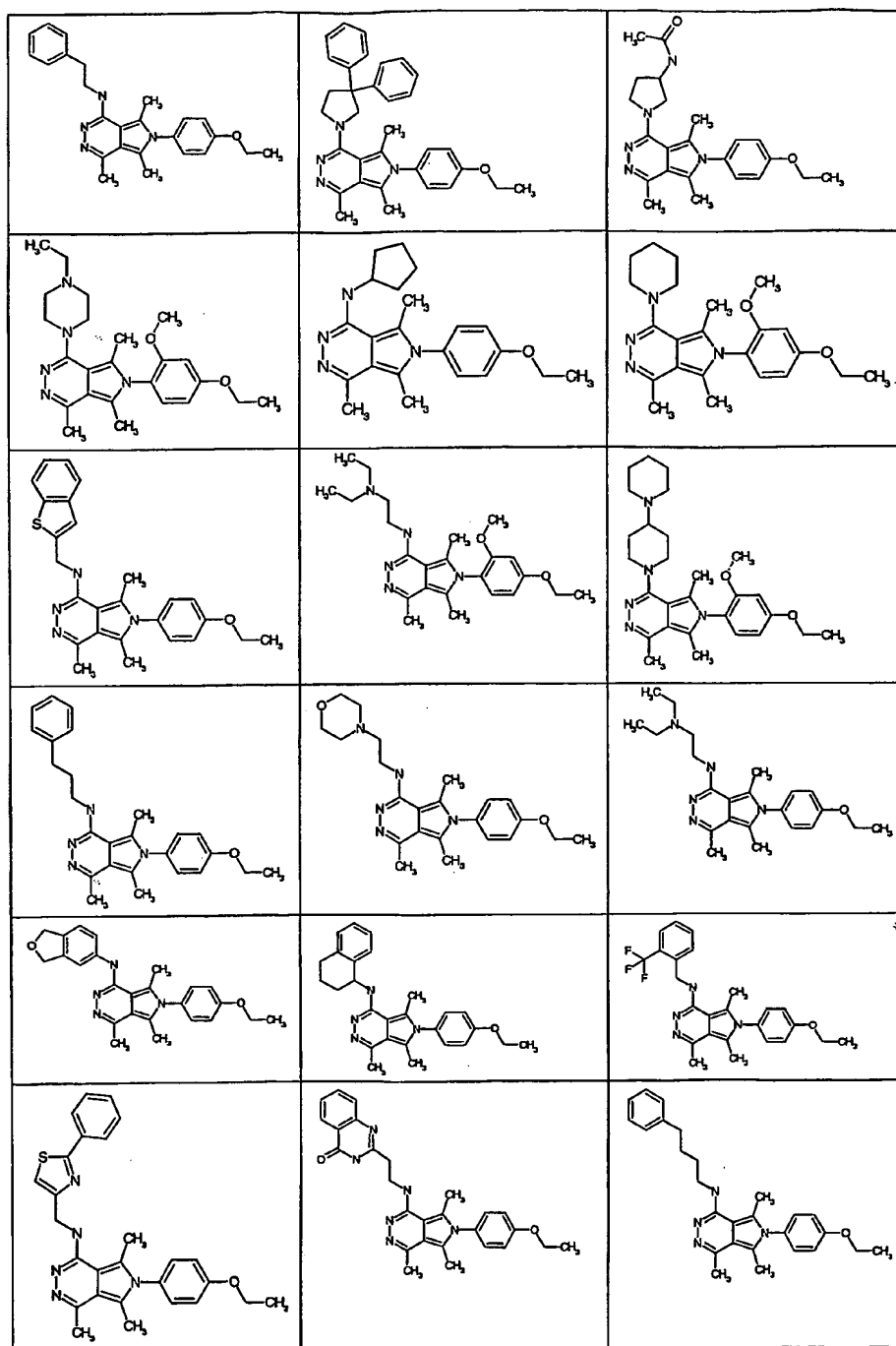


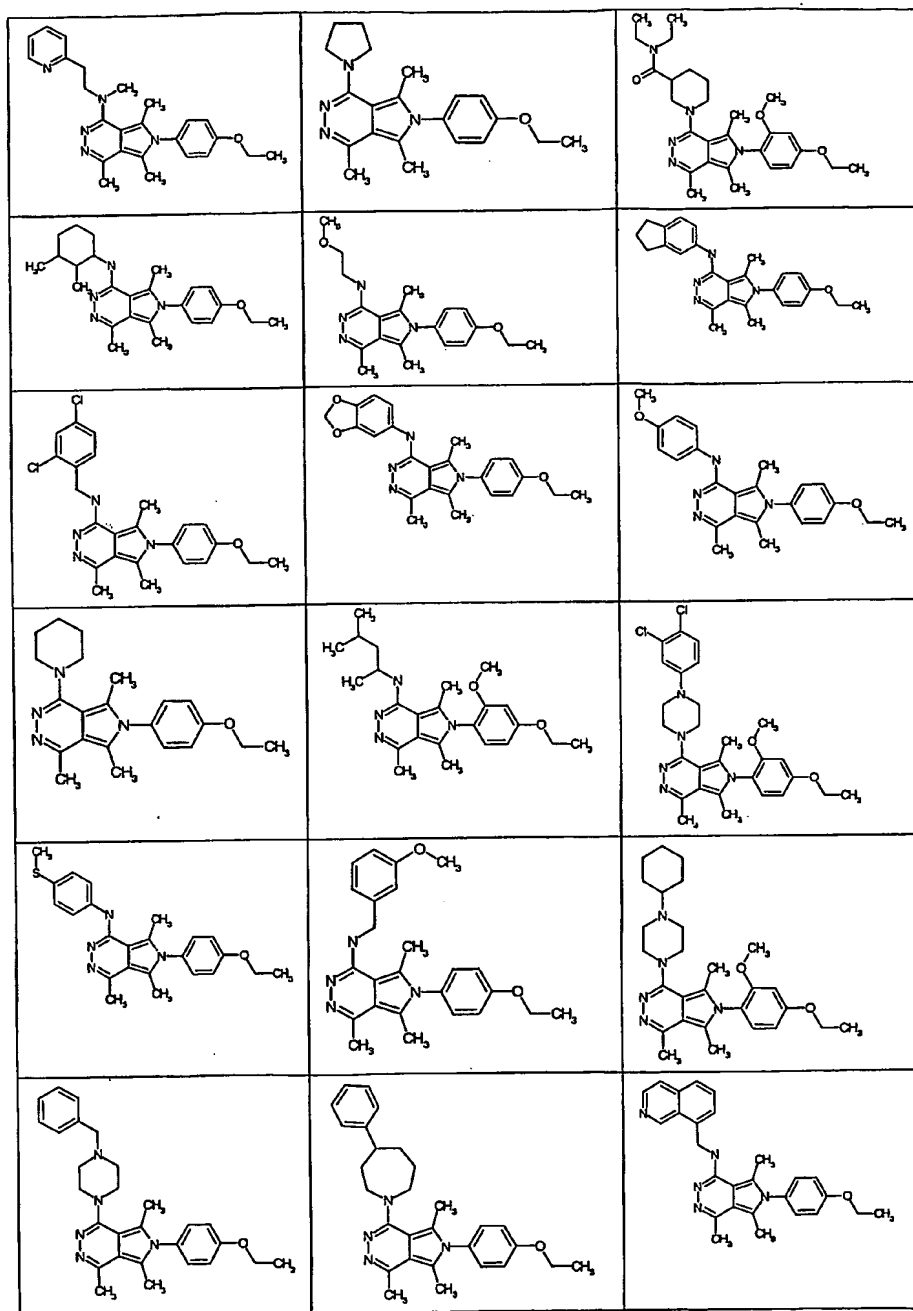


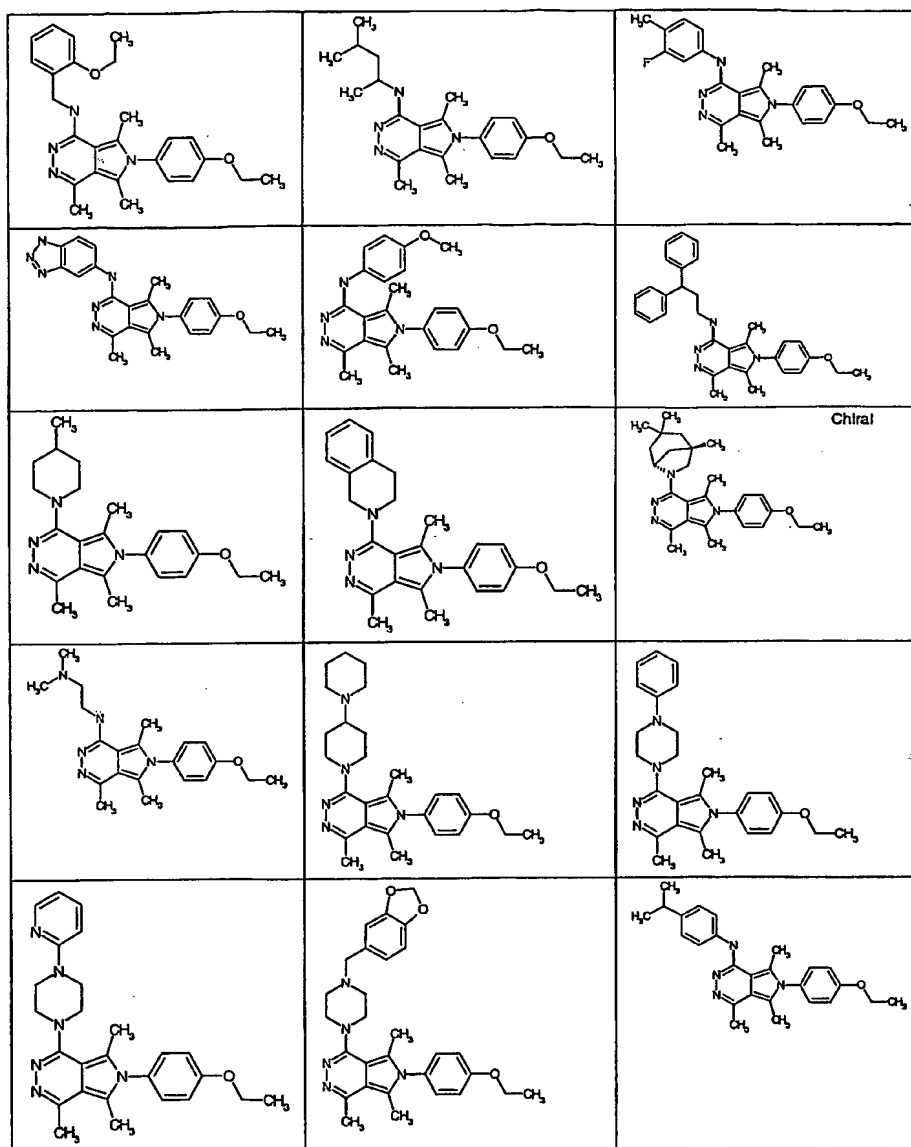


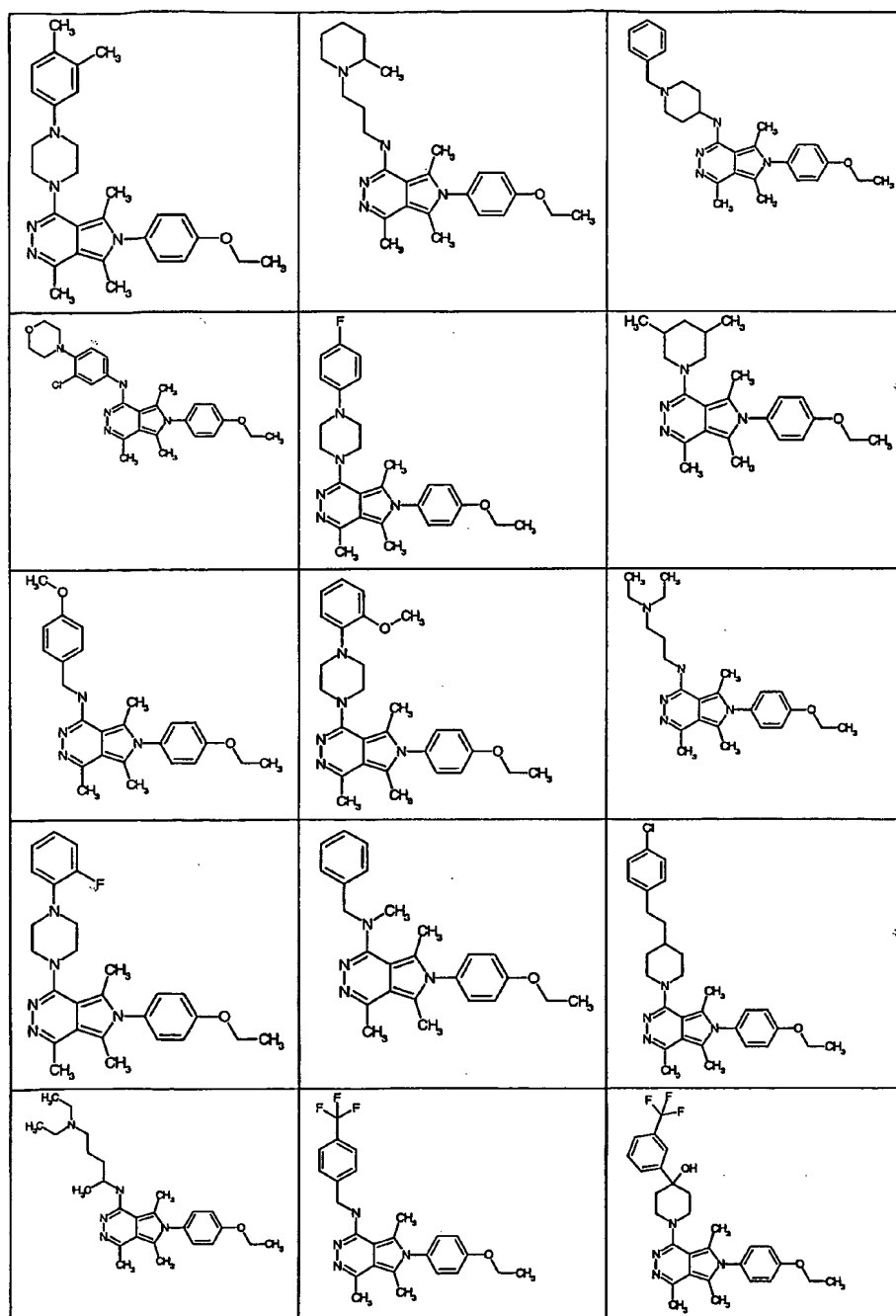


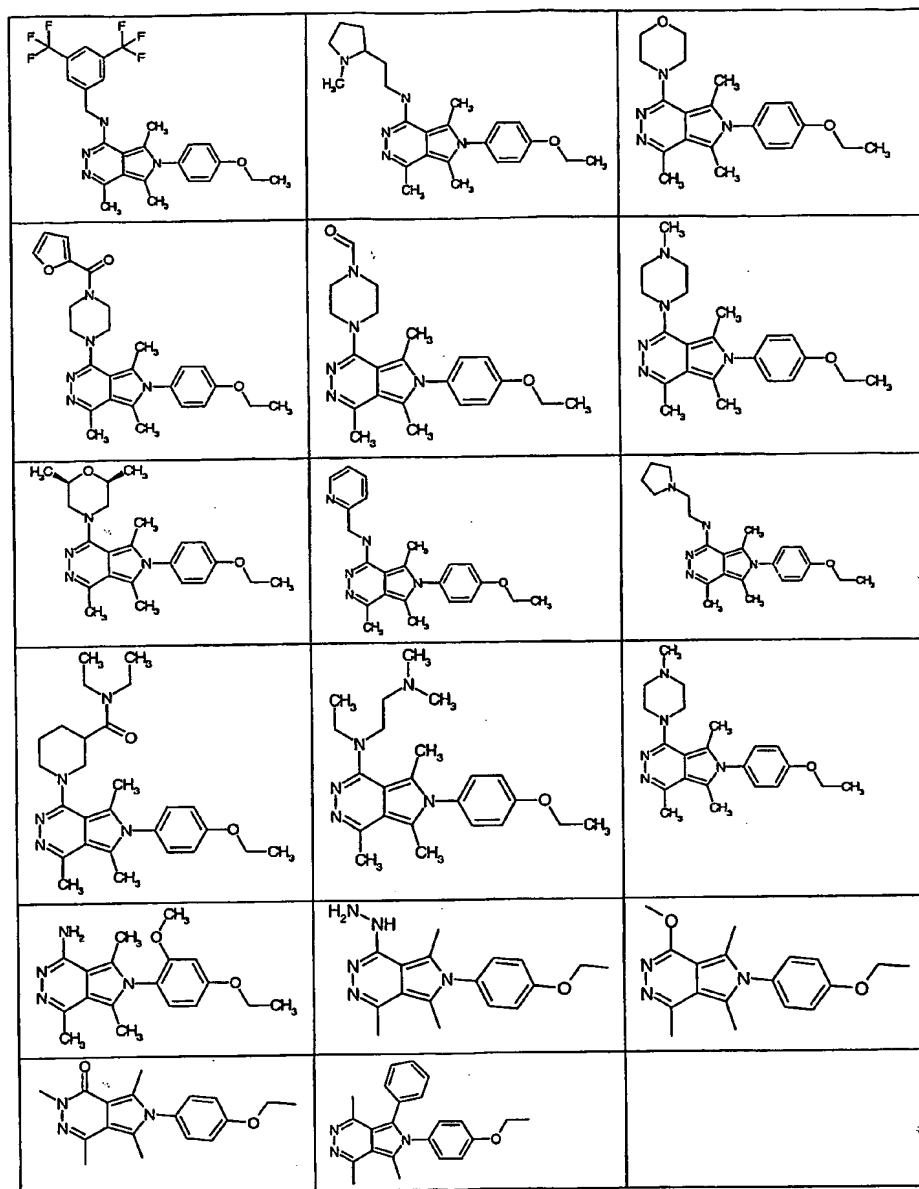






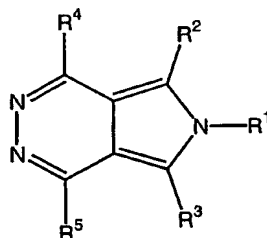






or a pharmaceutically acceptable salt thereof.

26. A compound represented by Formula (I):



(I)

or a pharmaceutically acceptable salt thereof, wherein

- 5 R1 is -C0-6alkyl-aryl, -C0-6alkyl-heteroaryl, -C0-6alkyl-C3-6cycloalkyl, or -C0-6alkyl-heteroC3-7cycloalkyl, optionally substituted with 1-6 independent halogen, -CN, NO₂, -C1-6alkyl, -C0-6alkyl-C3-6cycloalkyl, -C0-6alkyl-heteroC3-7cycloalkyl, -OR6, -NR6R7, -C(=NR6)NR7R8, -N(-NR88R6)NR7R8, -NR6COR7, -NR6CO₂R7, -NR6SO₂R88, -NR6CONR7R8, -SR88, -SOR88, -SO₂R88, -SO₂NR6R7, -COR6, -CO₂R6, -CONR6R7, -C(=NR6)R7, or -C(=NOR6)R7 substituents;

- 10 R2, R4, R3, and R5 each independently is -C0-6alkyl, -C0-6alkyl-aryl, -C0-6alkyl-heteroaryl, -C0-6alkyl-C3-6cycloalkyl, or -C0-6alkyl-heteroC3-7cycloalkyl, optionally substituted with 1-6 independent halogen, -CN, NO₂, -C1-6alkyl, -OR6, -NR6R7, -C(=NR6)NR7R8, -N(-NR88R6)NR7R8, -NR6COR7, -NR6CO₂R7, -NR6SO₂R88, -NR6CONR7R8, -SR88, -SOR88, -SO₂R88, -SO₂NR6R7, -COR6, -CO₂R6, -CONR6R7, -C(=NR6)R7, or -C(=NOR6)R7 substituents; and

- 15 R6, R7, R8, and R88 each independently is -C0-6alkyl, -C3-7cycloalkyl, heteroaryl, or aryl; optionally substituted with 1-5 independent halogen, -CN, -C1-6alkyl, -O(C0-6alkyl), -O(C3-7cycloalkyl), -O(aryl), -N(C0-6alkyl)(C0-6alkyl), -N(C0-6alkyl)(C3-7cycloalkyl), or -N(C0-6alkyl)(aryl) substituents; provided that the compound is not

- 20 6-methyl-6H-pyrrolo[3,4-d]pyridazine,
25 1,4,5,7-tetramethyl-6-phenyl-6H-pyrrolo[3,4-d]pyridazine,
 1,4,5-trimethyl-6,7-diphenyl-6H-pyrrolo[3,4-d]pyridazine,
 5,7-dimethyl-1,4,6-triphenyl-6H-pyrrolo[3,4-d]pyridazine,
 5-methyl-1,4,6,7-tetraphenyl-6H-pyrrolo[3,4-d]pyridazine,

- 1,4-bis-(4-methoxy-phenyl)-5,7-dimethyl-6-phenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,
 1,4-bis-(4-methoxy-phenyl)-5-methyl-6,7-diphenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,
 5 1,4-diethyl-5,7-dimethyl-6-phenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,
 1,4,5,7-tetramethyl-6*H*-pyrrolo[3,4-*d*]pyridazine,
N-(1,4,5,7-tetramethyl-pyrrolo[3,4-*d*]pyridazin-6-yl)-benzamide,
 1,4,5,7-tetramethyl-pyrrolo[3,4-*d*]pyridazin-6-ylamine picrate,
 1,4,5,7-tetramethyl-pyrrolo[3,4-*d*]pyridazin-6-ylamine,
 10 5,7-dimethyl-6-phenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,
 5,7-dimethyl-2-phenacyl-6*H*-pyrrolo[3,4-*d*]pyridazinium bromide,
 2-(2-methoxycarbonylvinyl)-5,7-dimethyl-6*H*-pyrrolo[3,4-*d*]pyridazinium tetrafloroborate
 5,7-diphenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,
 15 5,6,7-trimethyl-6*H*-pyrrolo[3,4-*d*]pyridazine,
 1,4-diphenyl-7,8,9,10-tetrahydro-pyridazino[4,5-*a*]indolizine,
 5-methyl-1,4-diphenyl-7,8,9,10-tetrahydro-pyridazino[4,5-*a*]indolizine,
 6-benzyl-1,4-diphenyl-5-*p*-tolyl-6*H*-pyrrolo[3,4-*d*]pyridazine,
 6-benzyl-5-(2-chloro-phenyl)-1,4-diphenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,
 20 1,4,5,6,7-pentaphenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,
 6,7,10,11-tetraphenyl-pyridazino[4',5':3,4]pyrrolo[1,2-*a*]quinoxaline,
 11-(4-nitro-phenyl)-6,7,10-triphenyl-pyridazino[4',5':3,4]pyrrolo[1,2-*a*]quinoxaline,
 25 6-benzyl-1,4,5-triphenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,
 9,12-diphenyl-pyridazino[4',5':3,4]pyrrolo[2,1-*a*]isoquinoline,
 5-methylsulfanyl-1,4,6,7-tetraphenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,
 1,4,6,7-tetraphenyl-6*H*-pyrrolo[3,4-*d*]pyridazine-5-carboxylic acid
 ethyl ester,
 30 7,10-diphenyl-pyridazino[4',5':3,4]pyrrolo[1,2-*a*]quinoline,
 11,14-diphenyl-pyridazino[4',5':3,4]pyrrolo[1,2-*f*]phenanthridine,
 1-oxo-7-oxy-6*b*,11*b*-dihydro(pyridazino[4',5'-*c*]-pyrrolo)[2.1-*c*]benzoxazine-1,4,
 10-methyl-1,4-diphenyl-8,9-dihydro-7*H*-benzo(*ef*)pyridazino[4,5-*a*]cycl[3.3.2]azine,

- 11-methyl-1,4-diphenyl-7,8,9,10-tetrahydrocyclohepta(ef)pyridazino[4,5-a]cycl[3.3.2]azine,
 1,4-dichloro-5,6,7-trimethyl-6*H*-pyrrolo[3,4-*d*]pyridazine,
 1-chloro-4-ethoxy-5,6,7-trimethyl-6*H*-pyrrolo[3,4-*d*]pyridazine,
 5 1-chloro-5,6,7-trimethyl-6*H*-pyrrolo[3,4-*d*]pyridazinium chloride,
 1-ethoxy-2,5,6,7-tetramethyl-6*H*-pyrrolo[3,4-*d*]pyridazinium
 tetrafluoroborate,
 1-ethoxy-5,6,7-trimethyl-2*H*,6*H*-pyrrolo[3,4-*d*]pyridazinium
 tetrafluoroborate,
 10 1-ethoxy-3-ethyl-5,6,7-trimethyl-6*H*-pyrrolo[3,4-*d*]pyridazinium
 tetrafluoroborate,
 1-ethoxy-5,6,7-trimethyl-6*H*-pyrrolo[3,4-*d*]pyridazine,
 5-cyano-1,4-dimethylpyridazino[4,5-*a*]indolizine,
 1,4-dimethyl-6-phenyl-2,3,8a-triaza-fluorene-9-carbonitrile,
 15 6-benzoyl-1,4-dimethyl-2,3,8a-triaza-fluorene-9-carbonitrile,
 6-benzyl-1,4-diphenyl-2,3,8a-triaza-fluorene-9-carbonitrile,
 1,4,6-trimethyl-2,3,8a-triaza-fluorene-9-carbonitrile,
 5-cyano-1,4-diphenylpyridazino[4,5-*a*]indolizine,
 6-methyl-1,4-diphenyl-2,3,8a-triaza-fluorene-9-carbonitrile,
 20 6-benzoyl-1,4-diphenyl-2,3,8a-triaza-fluorene-9-carbonitrile,
 1,4,6-triphenyl-2,3,8a-triaza-fluorene-9-carbonitrile,
 5,7-dimethyl-1,4-diphenyl-2,3,8a-triaza-fluorene-9-carbonitrile,
 9,12-diphenyl-pyridazino[4',5':3,4]pyrrolo[2,1-*a*]isoquinoline-8-
 carbonitrile,
 25 dimethyl 3,12,13,17-tetramethyl-7²,7³-diazabenzog[*g*]porphyrin-2,18-
 dipropionate,
 5,6-dihydro-2,3-dimethoxypyridazino[4',5':3,4]pyrrolo[2,1-
a]isochinolin-9-ol,
 5,6-dihydro-2,3-dimethoxypyridazino[4',5':3,4]pyrrolo[2,1-
 30 *a*]isochinolin-9-ol-hydrochloride,
 3-methyl-6,9-diphenylthiazolo[3',2':1,2]pyrrolo[3,4-*d*]pyridine, or
 1,4-diphenylpyridazino[4',5':3,4]pyrrolo[2,1-*b*]benzothiazole; and
 is not selected from the following table:

